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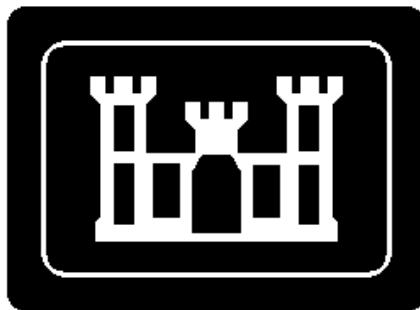
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# **RCRA FACILITY INVESTIGATION REPORT**

*FOR*

**FH-021 (Vehicle Battery Burial Site)  
FORT HOOD, TEXAS**

*PREPARED FOR*



**U.S. ARMY CORPS OF ENGINEERS  
FORT WORTH DISTRICT**

CONTRACT NO. DACA63-96-D-0021

MARCH 1999

**SAIC** Science Applications  
International Corporation  
An Employee-Owned Company

**RCRA Facility Investigation Report  
For  
Site FH-021 (Vehicle Battery Burial Site)**

**Prepared for  
U.S. Army Corps of Engineers  
Fort Worth District  
Fort Worth, Texas**

**Under Contract Number  
DACA63-96-D-0021**

**Prepared by  
Science Applications International Corp.  
655 Metro Place South, Suite 745  
Columbus, OH 43017**

**March 1999**

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## ACRONYMS

AA	Atomic absorption
ATV	All-terrain Vehicle
BEGM	Bureau of Economic Geology
BG	background
BGS	below ground surface
CQAR	Chemical Quality Assurance Report
DOT	Department of Transportation
DPW	Directorate of Public Works
EM	Electromagnetic
FH	Fort Hood
ft	feet or foot
GC/MS	Gas Chromatography/Mass Spectrometry
ICP	Inductively coupled plasma
IDW	Investigation Derived Waste
LCS	Laboratory Control Samples
MSC	medium specific concentration
msl	mean sea level
MS/MSDs	Matrix Spike/Matrix Spike Duplicate
ppb	parts per billion
ppm	parts per million
PQL	Practical Quantitation Limit
QA/QC	Quality Assurance/Quality Control
RCRA	Resource Conservation and Recovery Act
RFI	RCRA Facility Investigation
RRS	Risk Reduction Standards
SAIC	Science Applications International Corporation
SWMU	Solid Waste Management Unit
TCLP	Toxicity Characteristic Leaching Procedure
TNRCC	Texas Natural Resources Conservation Commission
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
UTL	upper tolerance limit

## **1.0 INTRODUCTION**

Fort Hood is an active U.S. Army installation occupying 217,551 acres (339 square miles) in southern Coryell and Bell Counties in central Texas. It is situated 60 miles north of Austin, and about 50 miles south of Waco. The installation is located north of and adjacent to the city of Killeen, east of and adjacent to the city of Copperas Cove, and four miles south of the city of Gatesville. A vicinity map is shown in Figure 1.1.

Fort Hood began operations in 1942. Robert Gray Air Field, originally operated by the Air Force as Robert Gray Air Force Base, was established in 1947 (U. S. Army 1996a). Fort Hood's mission is training, testing, and deployment of military personnel and equipment. The post is commanded by the III Corps Commander. Currently, the post supports two full armored divisions (the 1st Cavalry and 4th Infantry Divisions). Forty-three thousand military personnel are stationed there; and an additional 30,000 family members, civilians, volunteers, and private-sector employees also live or work at Fort Hood (U.S. Army 1996b). Among the military assets of Fort Hood are approximately 2,500 tracked vehicles, over 11,000 wheeled vehicles, six fixed wing aircraft, and 230 rotary-wing aircraft. The post has 67 active firing and demolition ranges.

The Fort Hood military reservation is regulated under the Resource Conservation and Recovery Act (RCRA) as a hazardous waste management facility. Fort Hood has a RCRA permit to operate three hazardous waste storage units. The RCRA permit requires that Fort Hood perform a RCRA Facility Investigation (RFI) for 40 solid waste management units (SWMUs) listed in the permit. These SWMUs are distributed across the military reservation, in the main cantonment, West Fort Hood, and North Fort Hood. They include former solid waste landfills and burial sites, former and inactive underground storage tank locations, active wash rack/sewer systems, effluent ponds, and a sanitary sewer network. An installation map is shown in Figure 1.2.

This report describes the collection and analysis of data from SWMU FH-021, Vehicle Battery Burial Site, one of 35 SWMUs investigated during the RFI conducted November 1996 through 1997. FH-021 is located north of the intersection of 16th Street and 18th Street at North Fort Hood. It is surrounded by SWMUs FH-002, -013, -014 and -015.

### **1.1 BACKGROUND**

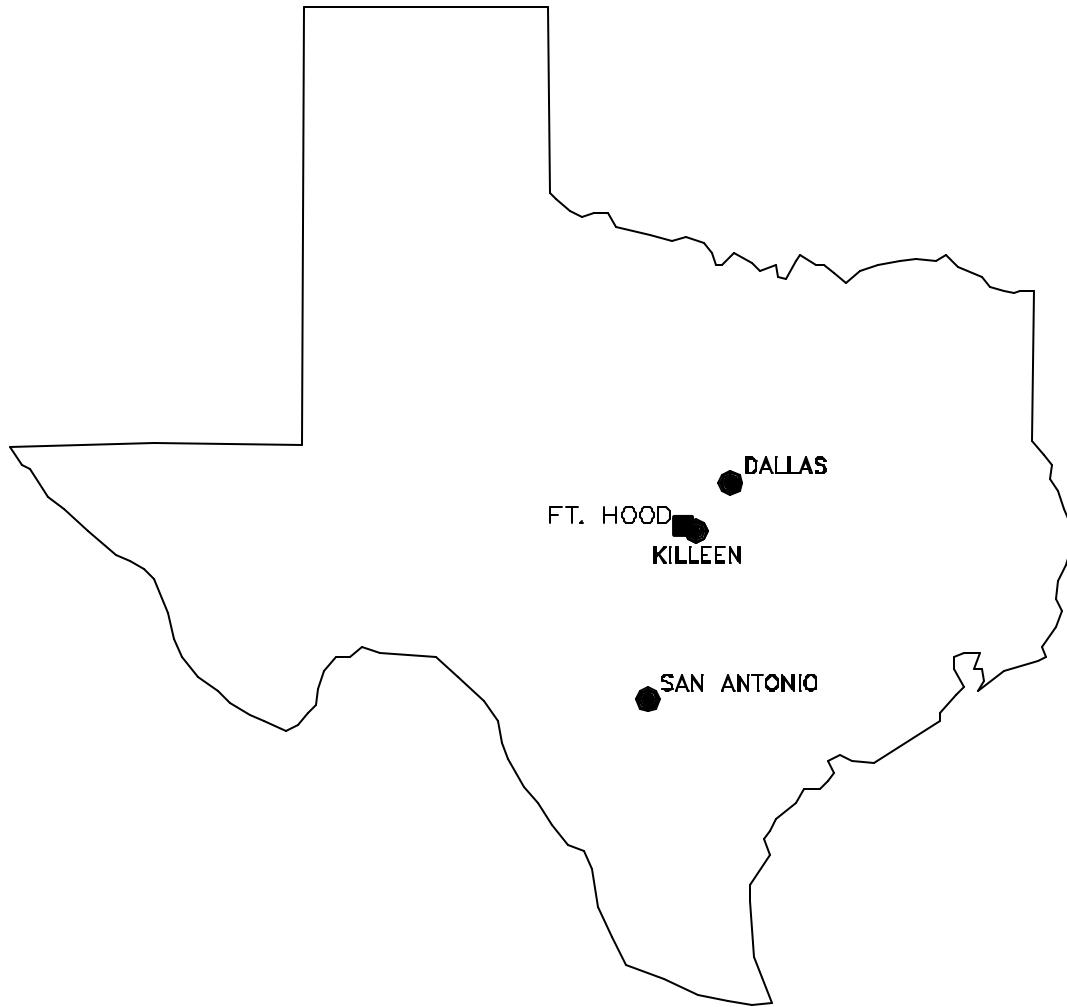
FH-021 is a suspected old burial site consisting of a single trench approximately 6 feet by 10 feet in size. The burial site was reportedly used only for the disposal of military vehicle lead-acid batteries. The site is surrounded by four abandoned sanitary landfills (FH-002, -013, -014 and -015). The landfills operated in the 1970's as trench-type landfills that received municipal solid waste, construction debris, and rubble.

### **1.2 SCOPE AND OBJECTIVES**

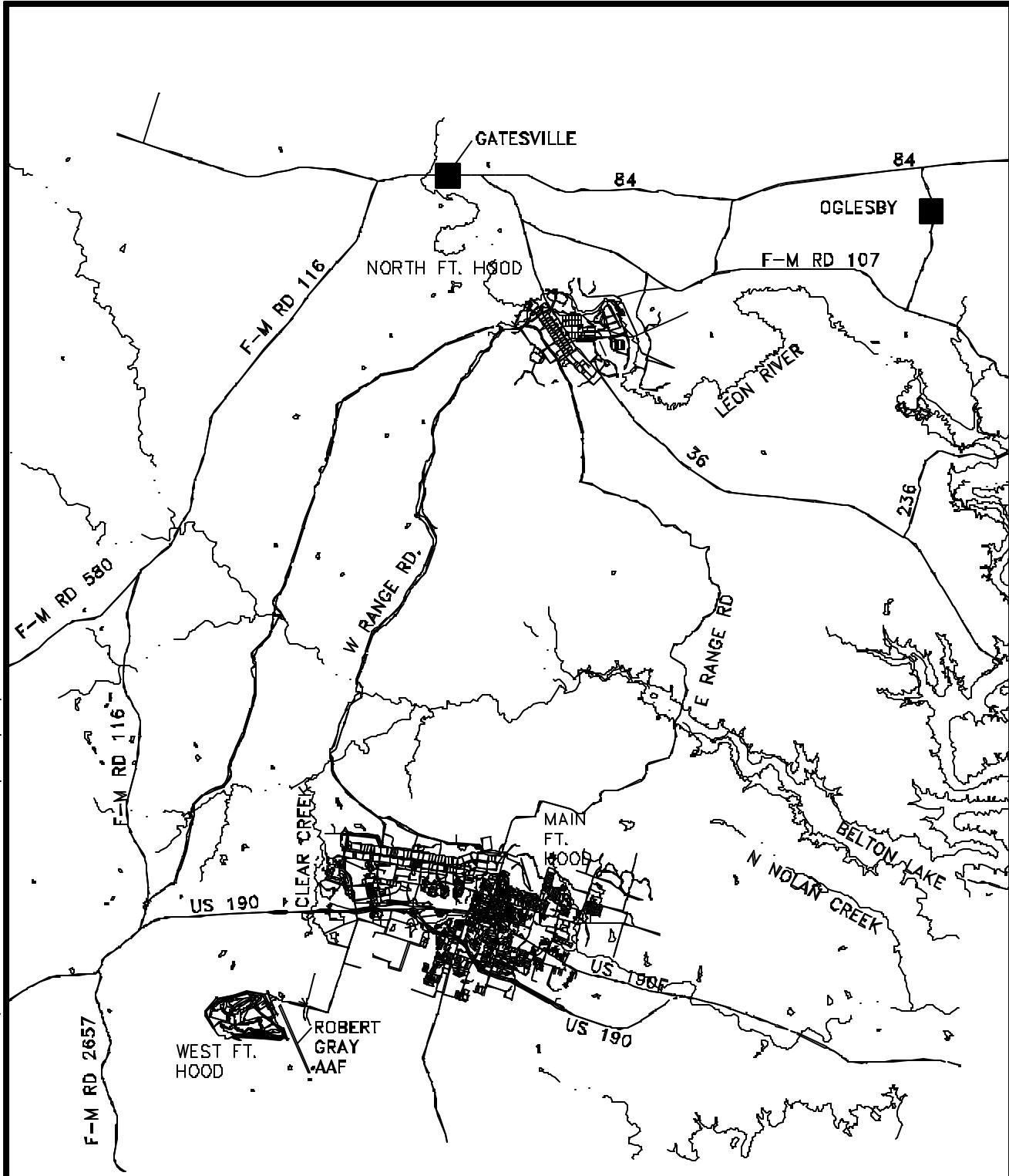
The objective of the RFI at FH-021 was to determine if lead-acid batteries were disposed at the site by identifying the precise location of the site and, if located, to determine if contamination is present. This report presents the results of the investigation and recommends what, if any, additional measures are needed.

The specific objectives of the investigation of FH-021 were as follows:

- identify the boundaries of the suspected burial site, and if present, the perimeters of the site;
- determine/confirm the presence or absence of contaminants in the soils within the site;
- characterize the migration potential of any contaminants identified in the soils.



U.S. ARMY FORT HOOD, TEXAS					
<b>RCRA FACILITY INVESTIGATION</b>					
<b>FORT HOOD VICINITY MAP</b>					
<b>SAC.</b>		<i>Science Applications International Corporation</i>		Columbus, Ohio	
DRAWN SC	CHECKED	DATE	SCALE NO SCALE	PROJECT NO.	FIGURE NO. 1.1



LEGEND

- MAJOR ROADS
- RIVERS/STREAMS
- WATER BODIES

U.S. ARMY  
FORT HOOD, TEXAS

RCRA FACILITY INVESTIGATION



FT. HOOD INSTALLATION MAP



Science Applications  
International Corporation Columbus, Ohio

DRAWN	CHECKED	DATE	SCALE 1"=7000M	PROJECT NO.	FIGURE NO. 1.2

The approach to the RFI included geophysics, field sampling, and laboratory analysis of subsurface soils. The sampling and analysis program was conducted in accordance with the Final RCRA Facility Investigation Work Plan for Fort Hood Site FH-021 (USACE 1995).

## **2.0 ENVIRONMENTAL SETTING**

The material presented in this section describes the physical characteristics of FH-021 and its surroundings. The geology, physiography, and climate are presented using regional and site-specific data where available.

### **2.1 PHYSIOGRAPHIC SETTING**

Fort Hood is located within the eastern edge of the Lampasas Cut Plains region of the North-Central Plains physiographic province. The topography of Fort Hood consists of small stream valleys separated by ridge-forming mesas. Relief is as great as 340 ft. The Black and Blackwell Mountains are prominent features north of the main cantonment, as are Seven Mile Mountain at West Fort Hood, and the Dalton Mountains southwest of North Fort Hood. A topographic map of the North Fort Hood is provided in Figure 2.1.

Local relief on the main cantonment and at West Fort Hood is generally less than 100 ft, with flat to gently rolling topography. North Fort Hood is also relatively flat with some gently rolling hills. Elevations at North Fort Hood range from 700 to 820 ft above mean sea level (msl). The Dalton Mountains southwest of North Fort Hood peak at 960 ft above msl. SWMU FH-021 elevation is approximately 720 ft above msl.

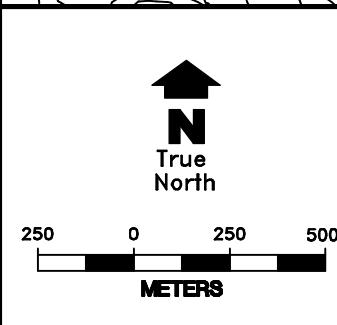
Surface drainage on North Fort Hood is primarily through Turnover Creek, which drains to the Leon River. Other unnamed tributaries also drain the central and southern portions of the north cantonment. The Leon River flows eastward, and drains into a northern branch of Belton Lake. Henson Creek drains the north central portion of North Fort Hood, and flows to the east, about 1.5 miles south of the north cantonment.

### **2.2 GEOLOGIC CONDITIONS**

A summary of the geology of the Fort Hood area relevant to this RFI is adapted from the Final RCRA Facility Investigation Work Plan, 35 Solid Waste Management Units, Fort Hood, Texas (USACE 1995). Relevant information on the occurrences of soils and bedrock has been incorporated to further characterize the geology of FH-021 and its surroundings.

#### **2.2.1 Bedrock**

Lower Cretaceous marine sedimentary rocks make up the stratigraphy underlying Fort Hood. The Fredericksburg Group consists of several stratigraphic units. The Walnut Formation is the lowermost unit of the Fredericksburg Group and is the dominant stratigraphic unit in the main cantonment. It consists of shales with interbedded limestone, chalky nodular limestone, and shell aggregates. The fossiliferous Walnut Formation is exposed in many locations at Fort Hood. It varies in thickness from 100 to 150 ft (BEGM 1979). At North Fort Hood, it may be exposed on the ground surface or be found to a depth of 55 ft (USACE 1995). The Comanche Peak Formation and an undifferentiated unit overlie the Walnut Formation, but are present at the surface only north of the main cantonment in the Black and Blackwell Mountains, and on West Fort Hood on Seven Mile Mountain. Bedrock dips gently to the southeast throughout the area. Inactive faults are present in the subsurface to the east of Fort Hood along the Balcones Fault Zone, which runs through Bell, McLennan, and Hill Counties.



U.S. ARMY  
FORT HOOD, TEXAS

RCRA FACILITY INVESTIGATION

TOPOGRAPHY AND DRAINAGE  
OF NORTH FT. HOOD

**SAIC** Science Applications  
International Corporation Columbus, Ohio

DRAWN BW	CHECKED	DATE	SCALE AS SHOWN	PROJECT NO.	FIGURE NO. 2.1
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## **2.2.2 Unconsolidated Materials**

The eastern edge of North Fort Hood is underlain by Quaternary terrace deposits associated with the Leon River. Clay soils of varying thicknesses (from 0 to 30 ft) overlie Walnut Formation strata on North Fort Hood. It is suspected that much alluvium and other natural surface deposits have been reworked throughout the active life of Fort Hood during construction projects.

## **2.3 CHARACTERIZATION OF SOILS**

In many areas of the north cantonment, silty or sandy clay soils overlie bedrock. In upland areas, these soils contain abundant rock fragments. In general, these soils have low permeabilities (USDA 1985a,b). They range in thickness from 15 to 30 ft. Because soils have been extensively reworked for construction and landfilling in the SWMUs that were investigated, it is difficult to apply the USDA classification to the soils encountered on North Fort Hood.

## **2.4 CHARACTERIZATION OF CLIMATE**

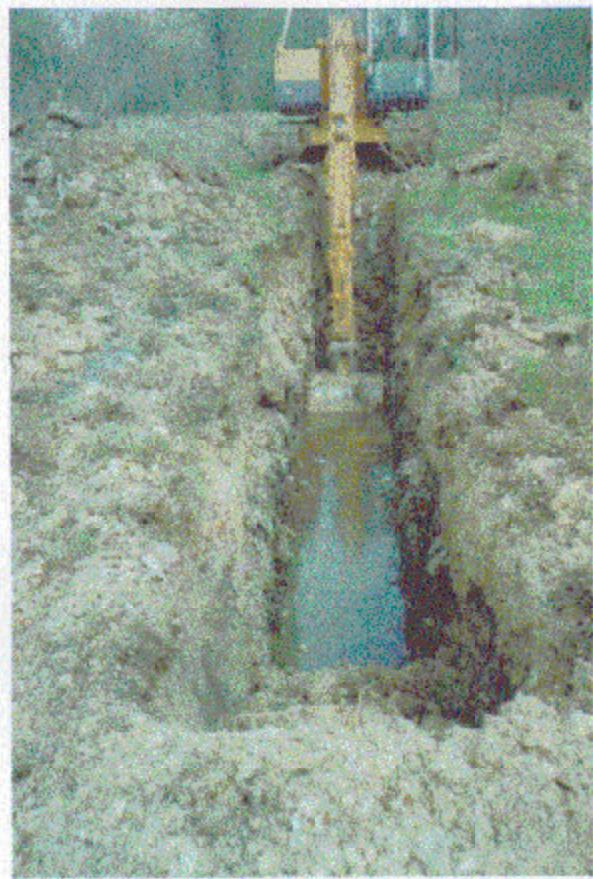
The climate of the Fort Hood-Killeen area can be characterized as semi-arid continental. Winters (December-March) are mild, with the average daily maximum temperature in January (the coldest month) reaching 60° F. Below-freezing temperatures occur on an average of 23 days per year. The normal daily winter temperature range is 42 to 62° F. At times, strong northerly winds accompanied by sharp drops in temperature occur during the winter months. Summers (June-September) are hot and dry. The average daily maximum temperature in August, the hottest month, reaches 95.9° F. The normal daily temperature range for summer is 75 to 95° F. The average daily temperature in Killeen is 68.1° F.

Average annual rainfall in the Killeen area is 30.4 inches, and is most concentrated from September to May (U.S. Army 1996). Snowfall is rare. The average annual humidity in the region is 55 percent. Total rainfall for 1996 at Fort Hood was 26.7 inches. The ten months prior to the start of the field program for this RFI were anomalously dry. During the five-month period in which the field program of the RFI was conducted, precipitation was higher than the historical monthly averages. Severe weather in the form of heavy rain, hail storms, and ice storms is common in the winter months.

### **3.0 UNIT CHARACTERIZATION**

Site FH-021 is currently covered by grasses and small areas of scrub brush. No buildings or buried utilities are present on the site. An overhead utility line extends westward from 18th Street just north of FH-021. Surface depressions oriented northwest-southeast are visible on the site, suggesting past disposal and subsequent settling at these locations. Photographs of the site from March 1997 are presented in Figure 3.1. The photographs were taken during excavation of the trenches at the site. The photographs show typical landfill debris unearthed during trenching. Groundwater was encountered while trenching at approximately 3 ft below ground surface (BGS).

No previous investigations have been performed at FH-021 to either identify the location of the burial site or to characterize the material at the site. In addition, no previous data or historical information were discovered during a site visit conducted in April 1995. The only known waste material reportedly disposed at the site was military vehicle lead-acid batteries. Therefore, the only anticipated contaminants of concern are corrosivity ( $\text{pH}>2$ ) and lead. The site is completely surrounded by SWMU's FH-002, -013, -014, and -015. Potential contamination resulting from migration of contaminants from the surrounding units does exist at FH-021.



**Figure 3.1** Photographs of FH-021

## **4.0 CHARACTERIZATION OF UNIT CONTAMINATION**

The RFI field program was designed to do the following at SWMU FH-021:

- identify the boundaries of the burial site, and if present, the perimeters of the site;
- determine/confirm the presence or absence of contaminants in the soils within the site; and,
- characterize the migration potential of any contaminants identified in the soils.

### **4.1 TECHNICAL APPROACH**

#### **4.1.1 Geophysical Investigation**

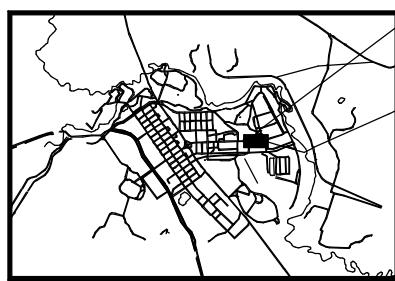
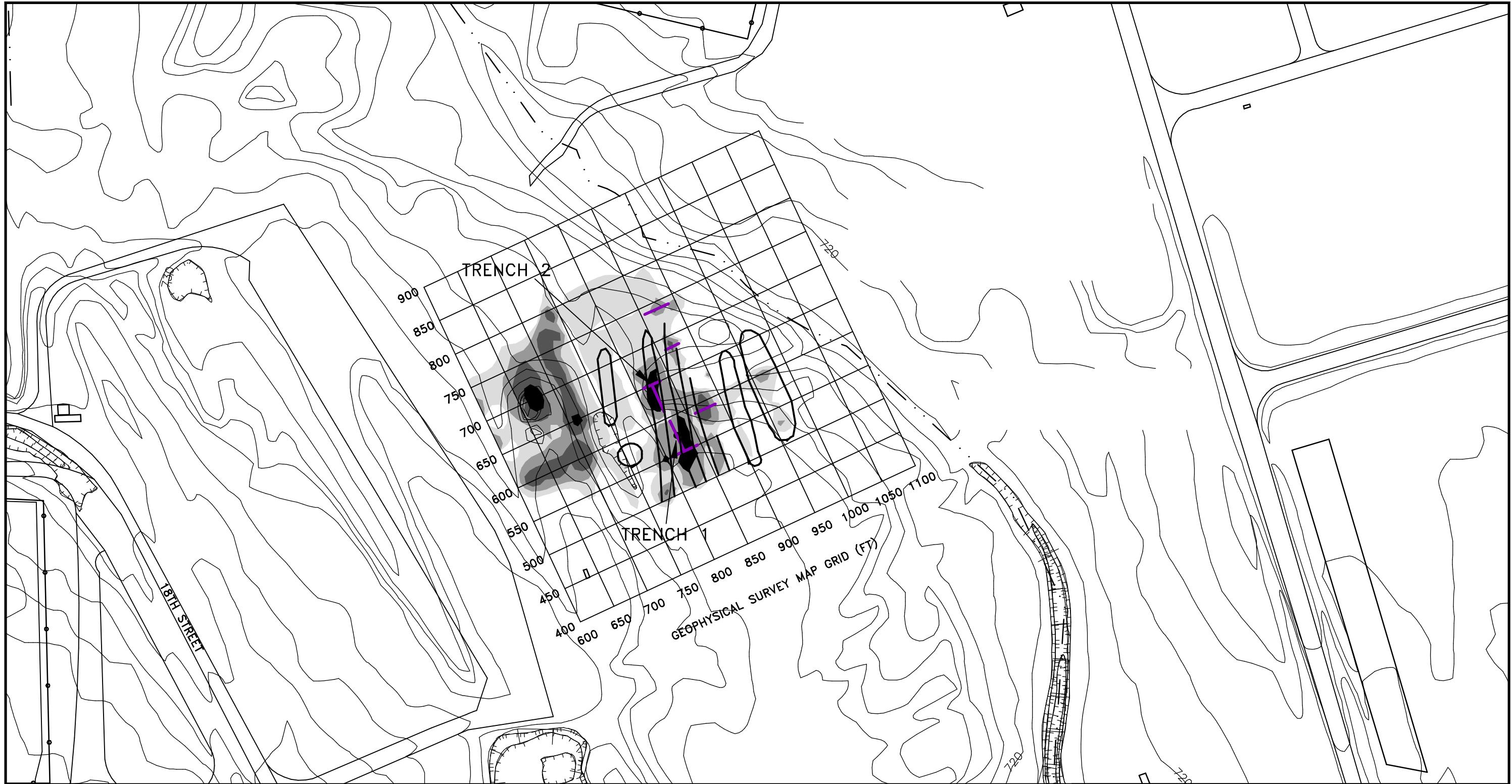
An EM-31 unit was used to determine electromagnetic (EM) conductivity in the suspected burial site. The survey was designed with the lines spaced five feet apart, and the grid points on each line spaced at five-foot intervals. A less dense grid spacing was used around the boundaries of the site. The objective of the survey design was to locate conductivity anomalies indicative of buried wastes or disturbed soils in FH-021, and thereby define the lateral boundaries of the site. The data were collected continuously across the northwest-southeast oriented rectangular grid. Collection of in-phase and quadrature data in both the horizontal and vertical dipole orientations permit high-resolution mapping of subsurface anomalies to a depth of approximately 18 ft. The preliminary location of the burial site boundaries was based on interviews with Fort Hood personnel.

The geophysical investigation was conducted in February 1997. Conditions during the investigation varied from very wet to dry. Data were collected electronically and processed to create contour maps of anomalies. The maps showing electromagnetic anomalies (vertical quadrature, vertical in-phase, horizontal quadrature, horizontal in-phase) are presented in Figure 4.1.

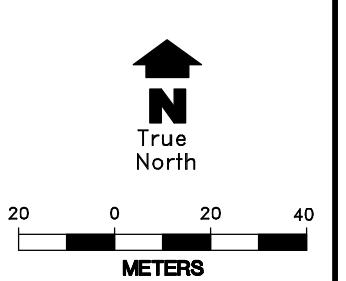
#### **4.1.2 Soil Sampling Investigation**

Soil trenches were excavated in the suspected burial site and sampled to meet the RFI objectives outlined above. The trench locations were selected at the approximate locations of the two most prominent conductivity anomalies observed during the geophysical survey (see Figure 4.2). These trenches also roughly coincided with the positions of two prominent surface depressions indicative of trench landfilling. Two northeast-southwest trending trenches on the north and south ends of the site were roughly 40 ft long and 3 ft wide. Two additional trenches were added perpendicular to the first two, to create two T-shaped excavations. The maximum depth of any trench was 8 ft and in Trench Number 2 rock was encountered at the bottom of the excavation at 7 feet depth. Small test pits were also excavated to delineate the northern limit of waste placement based on visual observations and the geophysical survey. All excavation work was conducted using a backhoe. Groundwater was encountered during trenching activities at approximately 3 ft BGS. Landfill materials were visibly present in both trenches below the water table (see photographs in Figure 3.1). Among the debris excavated at FH-021 that may have caused geophysical anomalies were bales of barbed wire, a washing machine, and metal storage lockers. Municipal refuse and demolition debris were the most common landfill constituents including, wire, metal banding, cans, and bottles. However, there was no physical evidence of vehicle batteries in any of the trenches excavated. The vertical limit of refuse placement was defined by the occurrence of bedrock from 7 to 8 ft BGS. Trenching logs for FH-021 are provided in Appendix A.

Soil samples were collected from the trenches in March 1997. Two samples were collected from each trench and the locations of the sampling points are shown in Figure 4.2. Soil was collected from the excavator bucket



FH-021  
NORTH FT.  
HOOD  
LOCATION  
MAP



LEGEND

- TOPOGRAPHIC CONTOUR (FT.)
- DRAINAGE
- TRENCH
- DEPRESSIONS
- INPHASE RESPONSE (PPT)

-3 4 6 7 10

U.S. ARMY  
FORT HOOD, TEXAS

RCRA FACILITY INVESTIGATION

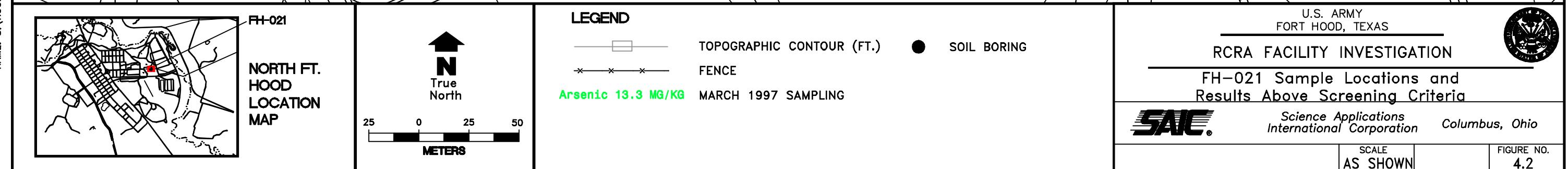
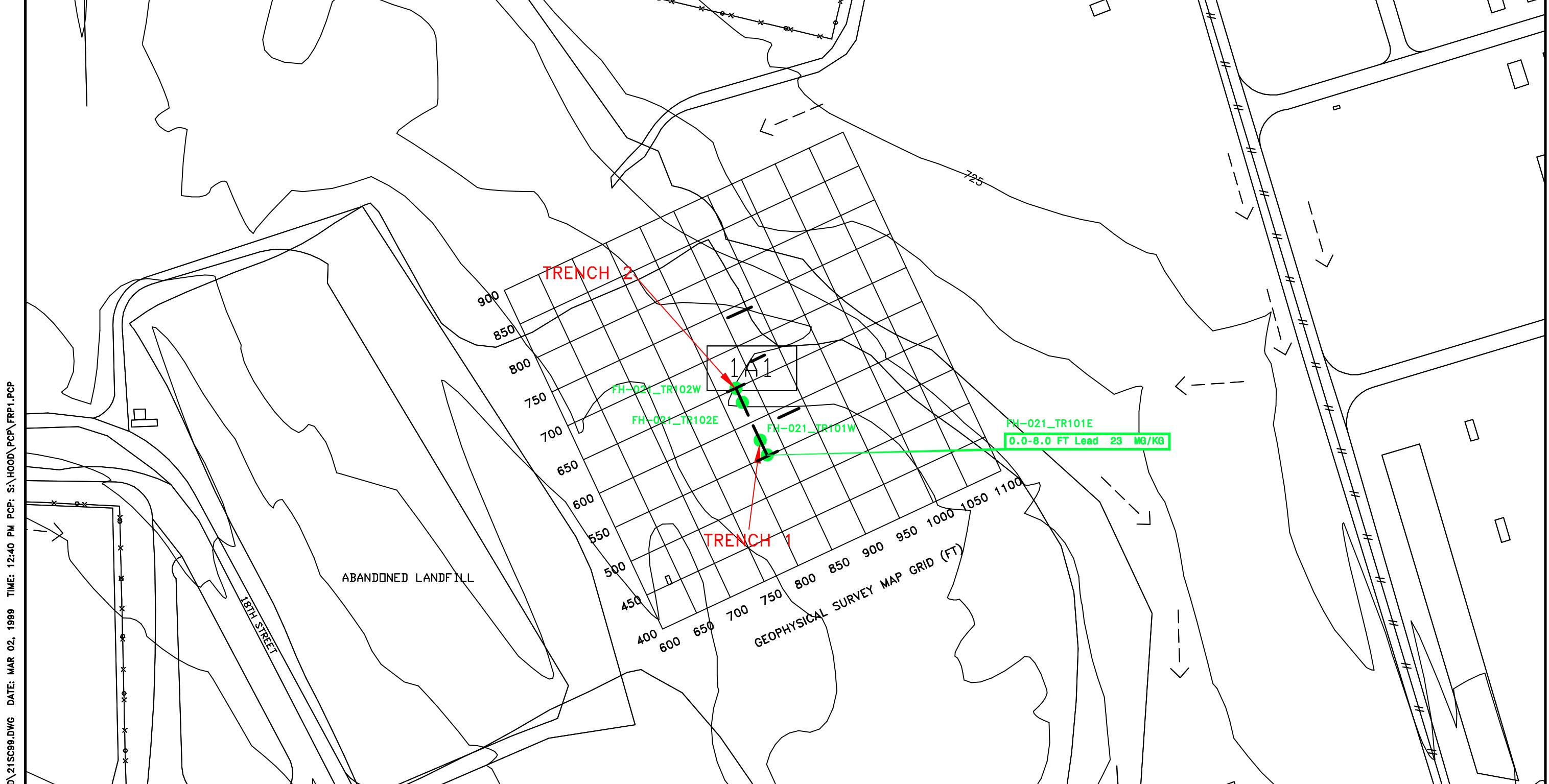


GEOPHYSICAL SURVEY MAP



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using a stainless steel spoon. It was not possible to segregate soils by depth intervals because of persistent caving and sloughing from the trench walls of saturated soils and refuse. Therefore, trench samples are regarded as composite samples representative of the 0-8 ft. depth interval. Soils collected from the trenches were in direct contact with wastes in the trenches. Therefore, the samples are more indicative of the waste source than a release from the site. The samples were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and metals. Although the primary contaminant of concern at FH-021 is lead, samples were analyzed for VOCs and SVOCs because of the proximity of the site to FH-002, -013, -014 and -015. All soil sampling, sample handling, chain-of-custody, and other field activities were conducted in accordance with the RCRA Facility Investigation Work Plan for 35 SWMUs (USACE 1995).

#### **4.1.3 Leachate Sampling**

Water was present in both trenches at approximately 3 ft BGS. A grab sample was collected from Trench Number 1 (FHG164) and Trench Number 2 East (FHG165) and analyzed in accordance with the RCRA Facility Investigation Work Plan for 35 SWMUs (USACE 1995). Due to the presence of waste material unearthed during trenching, the water was more characteristic of leachate material than groundwater.

### **4.2 UNIT INVESTIGATION AND ANALYTICAL RESULTS**

A summary of the analytical results for soils and water samples at FH-021 and their respective analytical method and practical quantitation limit (PQL) are provided in their entirety in Appendix B. Tables 4.1 and 4.2 summarize those constituents detected above PQLs in soils and leachate, respectively. Constituents detected in soils above detection limits were screened against background and risk-based screening criteria as described in Section 4.3 and Section 5.0. Figure 4.2 describes the soil sampling locations of the constituents detected above background or other screening criteria.

#### **4.2.1 Soil Analytical Results**

Inorganics including arsenic, barium, cadmium, chromium, and lead were all detected in soils collected at depths ranging from 0 to 8 ft at concentrations above PQLs (Table 4.1). Lead was detected in sample TR101E at a concentration of 23.0 ppm that is above the 95% UTL background concentration of 19.0 ppm. Cadmium, arsenic, barium, and chromium were not detected in any sample at concentrations above their corresponding 95% UTL background concentration.

Acetone (8 ppb) and trichloroethene (16 ppb) were detected at TR101W; acetone (7 ppb) and trichloroethene (8 ppb) were also detected at TR102E. Naphthalene was detected at TR102W at 10 ppb. Complete sample results and their respective PQL values are presented in their entirety in Appendix B.

#### **4.2.2 Leachate Results**

Analytes detected above PQLs are summarized in Table 4.2. Arsenic and barium were detected above PQLs in both water samples. Selenium was detected at TR101E at 8.2 J ppb. Lead and naphthalene were

**Table 4.1 FH-021 Analytes Detected Above Practical Quantitation Limits (PQLs) in Soils**

Location	Sample ID	Depth (Ft)	Analysis Type	Parameter	Result	PQL	Units
TR101E	21TR101	0.0-8.0	Metals	Arsenic	3.2	0.4	mg/kg
TR101E	21TR101	0.0-8.0	Metals	Barium	81.5	0.08	mg/kg
TR101E	21TR101	0.0-8.0	Metals	Cadmium	0.62	0.06	mg/kg
TR101E	21TR101	0.0-8.0	Metals	Chromium	12.3	0.09	mg/kg
TR101E	21TR101	0.0-8.0	Metals	Lead	23	0.23	mg/kg
TR101W	21TR104	0.0-8.0	Metals	Arsenic	3.3	0.36	mg/kg
TR101W	21TR104	0.0-8.0	Metals	Barium	58.9	0.07	mg/kg
TR101W	21TR104	0.0-8.0	Metals	Cadmium	0.21	0.06	mg/kg
TR101W	21TR104	0.0-8.0	Metals	Chromium	8.9	0.08	mg/kg
TR101W	21TR104	0.0-8.0	Metals	Lead	7.2	0.21	mg/kg
TR101W	21TR104	0.0-8.0	Volatile Organics	Acetone	8	6	ug/kg
TR101W	21TR104	0.0-8.0	Volatile Organics	Trichloroethene	16	6	ug/kg
TR102E	21TR103	0.0-8.0	Metals	Arsenic	5.5	0.39	mg/kg
TR102E	21TR103	0.0-8.0	Metals	Barium	58.3	0.08	mg/kg
TR102E	21TR103	0.0-8.0	Metals	Cadmium	0.29	0.06	mg/kg
TR102E	21TR103	0.0-8.0	Metals	Chromium	10.5	0.09	mg/kg
TR102E	21TR103	0.0-8.0	Metals	Lead	11.9	0.23	mg/kg
TR102E	21TR103	0.0-8.0	Volatile Organics	Acetone	7	6	ug/kg
TR102E	21TR103	0.0-8.0	Volatile Organics	Trichloroethene	8	6	ug/kg
TR102W	21TR102	0.0-8.0	Metals	Arsenic	2.9	0.39	mg/kg
TR102W	21TR102	0.0-8.0	Metals	Barium	64.2	0.08	mg/kg
TR102W	21TR102	0.0-8.0	Metals	Cadmium	0.11	0.06	mg/kg
TR102W	21TR102	0.0-8.0	Metals	Chromium	12.3	0.09	mg/kg
TR102W	21TR102	0.0-8.0	Metals	Lead	10.6	0.23	mg/kg
TR102W	21TR102	0.0-8.0	Volatile Organics	Naphthalene	10	6	ug/kg

**Table 4.2 FH-021 Analytes Detected Above Practical Quantitation Limits (PQLs) in Leachate**

<b>Location</b>	<b>Sample ID</b>	<b>Analysis Type</b>	<b>Parameter</b>	<b>Result</b>	<b>PQL</b>	<b>Units</b>
TR101E	FHGW164	Metals	Arsenic	4.8	2.1	Fg/l
TR101E	FHGW164	Metals	Barium	314	0.3	Fg/l
TR101E	FHGW164	Metals	Selenium	8.2 J	2.2	Fg/l
TR102W	FHGW165	Metals	Lead	3.5	0.9	Fg/l
TR102W	FHGW165	Metals	Arsenic	3.8	2.1	Fg/l
TR102W	FHGW165	Metals	Barium	232	0.3	Fg/l
TR102W	FHGW165	Volatile Organics	Naphthalene	19	5	Fg/l

J - Estimated value due to either laboratory and/or data validation qualification. The qualifier is applied to the result due to deviation(s) from laboratory or from data validation quality control criteria (i.e., calibration, surrogate recoveries, matrix spike/matrix spike duplicates, etc).

also detected above PQLs at TR102W at 3.5 ppb and 19 ppb respectively. Complete analytical results for leachate samples are presented in Appendix B.

#### **4.2.3 Disposition of Investigation Derived Waste (IDW)**

All IDW generated during trenching at FH-021 was stored in 55 gallon drums. No drums of soil cuttings were generated during the trenching investigation at FH-021. All IDW drums of liquid were clearly identified with Department of Transportation (DOT) approved labels, indicating the drum's contents, the date filled, and the SWMU where the IDW was generated. Drums were staged in the SAIC compound at North Fort Hood and then moved to the SAIC compound on the main cantonment pending disposition. Drums containing liquid waste were staged inside secondary containment areas.

Analytical results from the corresponding soil samples were used to determine whether a drum's contents were non-hazardous or potentially hazardous. Contaminant levels were screened against the Resource Conservation and Recovery Act (RCRA) "20 times" rule for the Toxicity Characteristic Leaching Procedure (TCLP). The contaminant levels for samples taken at FH-021 were lower than the "20 times" rule.

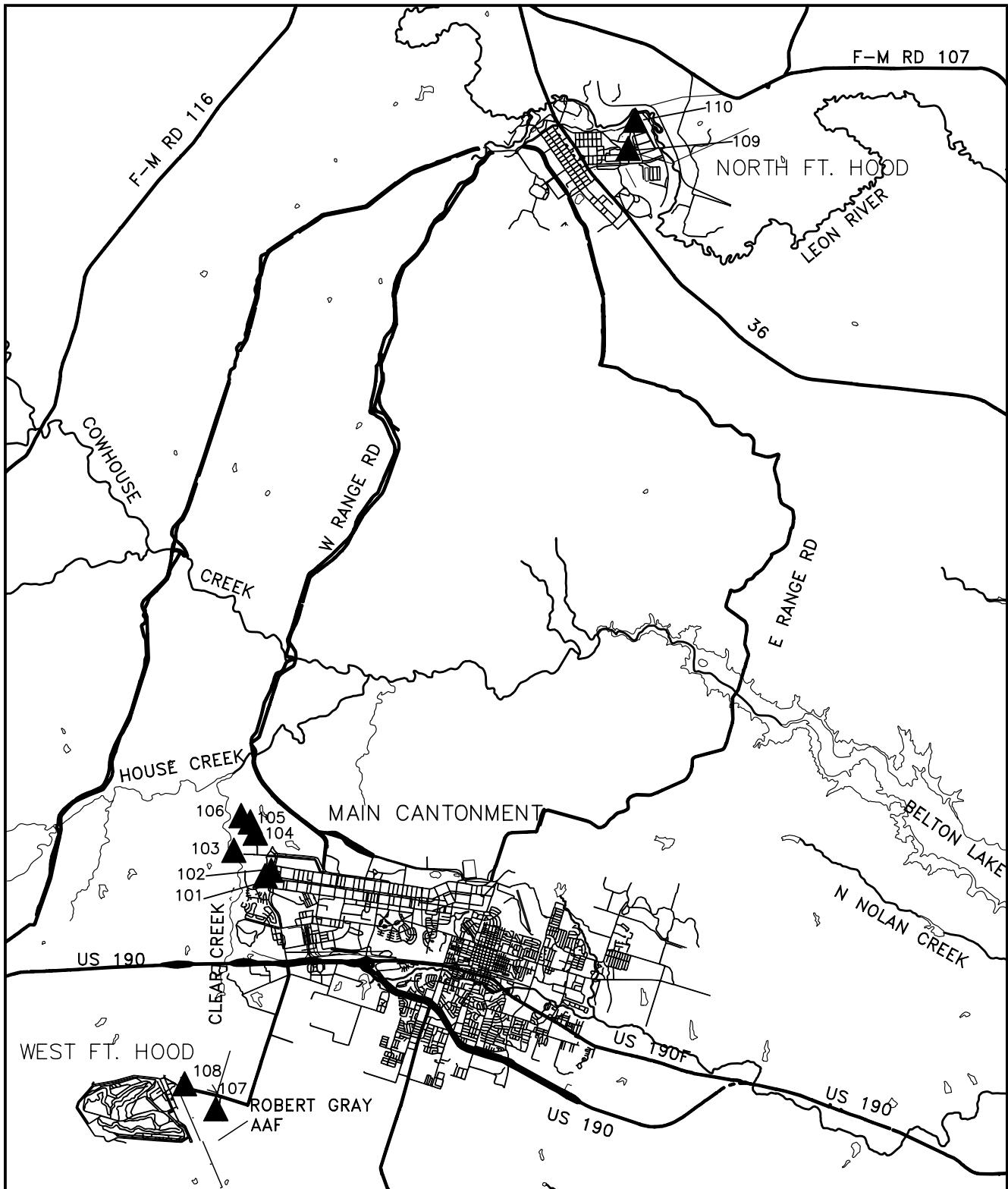
Drums of liquid IDW generated from the decontamination of equipment used at the trenching at FH-021 were disposed of in the 1st Calvary Division Tactical Vehicle Wash Facility. The drums containing the non-hazardous liquid were expected to contain a significant amount of sediment. For this reason, disposal at the 1st Calvary Division Tactical Vehicle Wash Facility was determined to be more appropriate than discharging the liquid to the sanitary sewer system. The Vehicle Wash Facility is a closed loop system consisting of three ponds used to settle out the dirt and sediment washed off the armored vehicles.

### **4.3 BACKGROUND CHARACTERIZATION AND COMPARISONS WITH WASTE UNIT SAMPLING RESULTS**

In order to characterize naturally occurring constituents in soils at Fort Hood, samples were located and collected at 10 separate locations within the facility boundaries in the north, west, and main cantonments. Sampling locations are outside the influence of past or current industrial and/or waste activities at the facility. The general background sampling locations are presented in Figure 4.3. Soil boring logs and analytical results for background soils are presented in Appendices C and D, respectively.

Samples were analyzed for the following metals: arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver. No quality assurance/quality control (QA/QC) problems were encountered with the background data set for arsenic, barium, cadmium, chromium, and lead. There were only 40 valid background sample results for selenium due to QA/QC problems with the selenium data. A discussion of the data QA/QC is presented in Section 6.1. Mercury was detected in only 1 of 43 subsurface soil samples and selenium in 2 of 40 background subsurface samples. Silver was not detected in any background soil samples.

Two statistical methods presented in the RFI Work Plan can be used to determine if there is a statistically significant difference between background soil concentrations and the concentrations of metals detected in SWMU samples. Background statistical calculations were determined by combining metal results from surface soils (0-2 ft) and subsurface soils (>2 ft). See Appendix E for Statistical Calculations. The statistical methods used to evaluate the background soil results are presented in Section 6 of the Final RCRA Facility Investigation Work Plan (USACE 1995). The methods include a 95% upper tolerance limit (UTL) calculation and an overall



LEGEND

— MAJOR ROADS

~~~~ RIVERS/STREAMS

○ WATER BODIES

▲ BACKGROUND SOIL SAMPLE LOCATION

U.S. ARMY  
FORT HOOD, TEXAS

RCRA FACILITY INVESTIGATION



LOCATIONS OF  
BACKGROUND SOIL SAMPLES



Science Applications  
International Corporation

Columbus, Ohio

| DRAWN<br>SC | CHECKED | DATE | SCALE<br>1"=5000M | PROJECT NO. | FIGURE NO.<br>4.2 |
|-------------|---------|------|-------------------|-------------|-------------------|
|-------------|---------|------|-------------------|-------------|-------------------|

### Background Soils

| Analyte (units)  | Mean   | 95% UTL | Maximum Detect | Results > PQL | Distribution |
|------------------|--------|---------|----------------|---------------|--------------|
| Arsenic (mg/kg)  | 4.3500 | 9.19    | 11.6           | 43/43         | N            |
| Barium (mg/kg)   | 30.19  | 157.3   | 155.0          | 43/43         | L            |
| Cadmium (mg/kg)  | 0.15   | 0.67    | 0.79           | 36/44         | L            |
| Chromium (mg/kg) | 7.32   | 24.88   | 23.6           | 44/44         | L            |
| Lead (mg/kg)     | 5.77   | 19.0    | 33.20          | 44/44         | L            |
| Mercury (mg/kg)  | 0.0400 | 0.04*   | 0.04           | 1/44          | D            |
| Selenium (mg/kg) | 0.345  | 0.44*   | 0.44           | 2/40          | D            |
| Silver (mg/kg)   | 0.218  | **      | ND             | 0/44          | D            |

Results less than the detection limit were set to ½ the reported detection limit.

L-distribution most similar to lognormal.

N-distribution most similar to normal.

D-distribution not determined because fewer than five detects or less than 50% detects.

\*UTL -maximum detected

\*\* The 95% UTL could not be calculated due to no detects in the background data set, therefore, the PQL is used as the background comparison value.

ND - Not Detected

data set mean background concentration. The 95% UTL is an estimate of the 95th percentile of the population of background concentrations. The UTL is a value such that, with a high degree of confidence, 95% of all concentrations would be less than the UTL value. Results of the 95% UTL calculation are presented in Table 4.3. For inorganic parameters where the distribution was neither normal nor lognormal and where there were less than 50% detects, the maximum concentration detected was used in place of the 95% UTL. For inorganic parameters where there were no detects in the background samples the PQLs were used in place of the 95% UTLs as the background comparison value. The 95% UTL background value for soils was used as the primary background screening criteria for inorganics.

The second statistical method determines the mean concentration for each metal detected in background samples and compares it against the mean concentrations determined for SWMU analytes. At FH-021 all inorganic sample results were less than 95 % UTL, therefore, the mean comparison statistics were not needed. The flow chart from the Final RCRA Facility Investigation Work Plan for 35 SWMUs (USACE 1995) used for the statistical evaluations is provided in Appendix E. Additionally, Appendix E contains spreadsheets of the Shapiro Wilk test on the background data for distribution, and results of the 95% UTL calculations for the background data. The values from the statistical calculations were used in the screening procedures and are included in Table 4.3.

## 5.0 SOIL SCREENING RESULTS

The Texas Natural Resource Conservation Commission (TNRCC) has promulgated risk reduction standards (30 TAC 335, Subchapter S) for soils and groundwater for residential and industrial land uses. Risk Reduction Standards (RRSs) Number 1 are defined as background concentrations or analytical practical quantitation limit (PQL) values whichever are greater. The TNRCC RRSs Number 1 were used to determine the presence of contamination in soils at the site. In order to evaluate the constituents detected in soils at FH-021, soil sample results were compared to the 95% UTL background concentration levels. Background soil levels were determined for 8 metals and the results are presented in Section 4.3. Metals detected above background levels are considered a potential release from the unit. Organic constituents detected above the analytical PQL are considered as a potential release. As noted in Section 4.0, soil samples were collected directly from the trenches where evidence of landfilling was observed. Samples were in direct contact with wastes and therefore are more indicative of the waste source than a release from the site. Results of the background soil screening analysis is presented in their entirety in Appendix F. Table 5.1 lists the FH-021 sample results above screening criteria.

Only lead was detected in soils above the corresponding 95% UTL background concentration. Lead was detected in one sample TR101E at a concentration of 23 ppm that is above the background concentration of 19.0 ppm. This lead value is slightly above the 95% background UTL but below the maximum detected concentration for lead (33.2 ppm) found during the background investigation. Additionally, the organic compounds acetone, naphthalene, and trichloroethene were detected in samples above PQLs. The concentrations of these three organic compounds were low. Acetone is a common laboratory contaminant and the concentrations detected in the FH-021 soil samples were 8 ppb and 7 ppb which are slightly above the laboratory PQL of 6 ppb. Naphthalene, normally detected in the SVOC analyses was detected in the VOC analyses of one soil sample and one leachate sample at concentrations of 10 ppb and 19 ppb, respectively. Because naphthalene was not detected above PQLs in the SVOC analyses and found only in low concentrations above the VOC PQLs indicates that the naphthalene results represent data anomalies that were not verified by the primary analytical method—SVOC analyses. Lastly, trichloroethene was detected in two soil samples at concentrations of 16 ppb and 8 ppb, that are less than four times the laboratory PQL of 5 ppb. The low concentration of lead and the organic compound detections are not indicative of disposal of lead battery activities and do not substantiate that a release has occurred at FH-021.

Constituents detected above background or PQL values were further screened against TNRCC RRSs Number 2. The TNRCC RRS Number 2 for soils are numerical values established by the TNRCC as protective of human health and the environment. Soil RRSs Number 2 are based on ingestion of soil and inhalation of particulates and volatiles or a soil-to-groundwater cross-media protection concentration, whichever is lower. If the PQL and/or background concentration for a contaminant is greater than the risk-based value(s), the greater of the PQL or background is used as the RRSs Number 2. The background concentration for lead at the Fort Hood Installation is lower than the TNRCC risk-based value. Therefore, the TNRCC RRS Number 2 value for lead was used for further screening. Naphthalene, acetone, and trichloroethene were all present in soil samples at values below the TNRCC RRSs Number 2.

**Table 5.1 FH-021 Analytes Detected Above Screening Criteria in Soils**

| Station | Sample ID | Analyte | Result | Units | Criterion       | Screening Value | Units |
|---------|-----------|---------|--------|-------|-----------------|-----------------|-------|
| TR101E  | 21TR101   | Lead    | 23     | mg/kg | Soil Background | 19.0            | mg/kg |

## **6.0 INVESTIGATION ANALYSIS**

### **6.1 DATA QUALITY ASSURANCE/QUALITY CONTROL**

The Fort Hood RFI Work Plan, the contract laboratory's Quality Assurance Plan, and USEPA SW-846 or other approved procedures for analytical chemistry and physical testing methods were followed for field and laboratory quality assurance/quality control (QA/QC) of FH-021 samples. Field QC samples included; trip blanks, rinsate blanks, field duplicates, and split samples. All QA and QC samples were collected as replicate samples of the same field sample. The QA and QC samples were collected at a frequency of 10 percent and analyzed along with the associated environmental samples. Laboratory QC procedures as prescribed by each analytical method were followed by the contract laboratory and included, where applicable: gas chromatography/mass spectrometry (GC/MS) tuning, initial and continuing calibrations, method/extraction blanks, laboratory control samples (LCS), surrogate spikes, internal and external standards, duplicates, matrix spikes/matrix spike duplicates (MS/MSDs), inductively coupled plasma (ICP) and atomic absorption (AA) related QC procedures/samples and spiked sample clean-up results.

Quality control analyses were conducted by the contract laboratory as an internal control measure of the accuracy and precision of the data. Quality assurance sample analyses were performed by the Army Corps of Engineers' Southwest District Laboratory as an external control measure of the accuracy and precision of the contract laboratory's results and of sampling procedures. The QA/QC, and corresponding field sample results are reviewed by Army Corps of Engineers quality assurance personnel, who then issues a Chemical Quality Assurance Report (CQAR).

The CQAR presented findings that indicated there was a potential for:

- C variability for acetone in sample TR101;
- C false negatives for 1,2,4-trichlorobenzene and 1,2,3 trichlorobenzene in TR101 and TR102;
- C possible false positives for chromium in all four samples;
- C low bias for selenium in TR103 and TR104;
- C false positives for methylene chloride (water TR101); and
- C false positive for lead (water TR102).

These CQAR findings indicate that caution needs to be applied when interpreting the results due to the above analytical deviations. Based on these findings, no data would be rejected and all data is useable. The only impact that these CQAR findings would have on the data set is that the above samples would be qualified as estimated detects (J) or estimated non-detects (UJ) if data validation was conducted on those samples. The split QA/QC sample analyses by the Corp's laboratory indicated disagreement in the arsenic, cadmium, and lead results with the primary sample results. This does not impact the useability of the data because the QC sample agreed with the primary sample according to the following guidelines for replication.

It should be noted that replication of a concentration of a constituent in soil samples is difficult due to the heterogeneity of soils. Analyses are considered good and reproducible for soil samples if the highest concentration reported in a set of samples for a single field sample is less than five times the lowest concentration reported in the same set of samples. This holds true as long as all other quality control measures and data quality objectives (e.g. holding times, surrogate recoveries, internal standards, etc) are met. A review of the data results for TR101 and QC split sample FHSB238 indicate that the replicate soil sample

results for FH-021 are considered good and reproducible for this site based on the criteria cited above.

Data QA/QC procedures also included an independent data validation of 10 percent of the results for compliance of analyses to data quality objectives. All results for FH-021 data that were reviewed as a function of the data validation task met project data quality objectives, and are usable data with the exception of the selenium results for 10 background soil samples. The selenium results were rejected due to unacceptable matrix spike recoveries and were therefore excluded from background calculations. The rejected background data had no impact on the FH-021 results. No other problems with the data were encountered that would have resulted in rejection of the data. Acetone was detected in an equipment rinseate sample (ER068) that resulted in qualifying associated samples as non-detects based on the action level established from the acetone concentration in the equipment rinseate sample. A copy of the laboratory results and the associated quality control samples are included in Appendix B.

## **6.2 INVESTIGATIVE RESULTS**

The data set for soils at FH-021 and the quality of the data are useable for the objectives of the RFI as described in Section 4.0 of this report. Four trenches were excavated in the suspected burial site and subsurface soils were sampled in order to identify the lead-acid batteries reportedly buried at the site. The trench locations were selected at the approximate locations of the three most prominent conductivity anomalies observed during the geophysical survey and they also coincided with the positions of two prominent surface depressions indicative of trench landfilling. Small test pits were also excavated to delineate the extreme northern limit of waste placement. Trenching results did not reveal the presence of lead-acid batteries; however landfill materials were visibly present in both trenches below the water table. Because no contaminants found are associated with the FH-021 landfill activities, there is no potential for migration of contaminants from FH-021. The most common debris excavated at FH-021 was municipal refuse and demolition debris.

A total of four soil samples were collected from the trenches and analyzed according to the Final RCRA Facility Investigation Work Plan for 35 SWMUs (USACE 1995). Since the battery burial site was not located during trenching activities, soil sampling did not provide information regarding the vertical and lateral extent of potential contamination or the boundaries of the suspected disposal area. Visual observation and results of the soil analysis indicate that the site was used for municipal solid waste disposal and may represent past landfilling associated with SWMU's FH-002, FH-013, FH-014, and FH-015.

## **7.0 CONCLUSIONS AND RECOMMENDATIONS**

The physical, visual, and analytical results for FH-021 do not provide any evidence that the site was used for disposal of lead acid batteries. Depressions identified along the ground surface of the site are similar to the surface conditions associated with the surrounding landfill activities and are not specific to a single trench used for the disposal of lead acid batteries. Trenching conducted at the site identified typical municipal waste material and analytical results from soils collected from the trenches do not indicate that there is waste associated from the disposal of lead batteries. Because no contaminants found are associated with the FH-021 landfill activities (disposal of lead batteries), there is no potential for migration of contaminates from FH-021. Both the soil and the water samples indicate that constituents present may be associated with the surrounding SWMU's FH-002, FH-013, FH-014, and FH-015. Therefore, it is recommended that the results from this investigation be used to support the RFI investigations of the surrounding landfills. Based on the information presented in this RFI report, the investigation of FH-021 did not indicate that the disposal of lead batteries had occurred in this SWMU and no further action is needed at FH-021.

## **8.0 REFERENCES**

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- EPA 1989. Guidance Document on the Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities, (EPA/530-SW-89-026).
- 30 TAC 335. Industrial Solid Waste and Municipal Hazardous Waste, Subchapter K. Hazardous Substance Facilities Assessment and Remediation.
- U.S. Army. 1996a. Fort Hood 1996 Public Affairs Document. 72p.
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- U.S. Army. 1992 "History of Fort Hood: The First Fifty Years 1942-1992." III Mobile Army Corps, 7p. (leaflet).
- USACE. 1995. Final RCRA Facility Investigation Work Plan. 35 Solid Waste Management Units, Fort Hood, Texas. December 1995.
- USDA 1985a. Soil Survey of Coryell County, Texas. Soil Conservation Service.
- USDA 1985b. Soil Survey of Bell County, Texas. Soil Conservation Service.
- USEPA, SW-846. Test Methods for Evaluating Solid Waste. Physical/Chemical. Second Edition, Rev. 0, September, 1986, and Third Edition, Rev. 1, November 1990.
- USEPA, 1989. Guidance Document on the Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, EPA/530-SW-89-026.

## **APPENDIX A**

### **FH-021 Trenching Logs**



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Fort Worth District  
Fort Worth, Texas

## Trench FH021-TR101

(Page 1 of 1)

SWMU FH021 : Vehicle Battery Burial Site  
Start Date : 03/19/97  
End Date : 03/19/97  
Northing Coord. : Not  
Easting Coord. : Surveyed  
Total Depth of Trench : 8.0 feet

Drilling Company : Terra-Mar  
Driller : Bill Christopher  
Designation of Drill : Kamatsu  
Type of Drill Rig : Trackhoe  
Geologist : Jeff DeVaughn  
Depth to Bedrock : Not Encountered  
Depth Drilled Into Rock: NA  
Trench Width : 3.0 feet  
Sampling Equipment : Trackhoe Bucket  
: SS Bowl and Spoons

| Depth in feet | Surf. Elev. NS | USCS | GRAPHIC | Water Levels | DESCRIPTION                                                                                         | REMARKS                                                                                                                                               |
|---------------|----------------|------|---------|--------------|-----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| 0 - 0         |                |      |         |              | Silty CLAY; limestone fragments and several pieces 3-4' diameter; damp to dry; 2.5Y7/3 pale yellow. |                                                                                                                                                       |
| 1 - -1        |                |      |         |              |                                                                                                     |                                                                                                                                                       |
| 2 - -2        |                | CL   |         |              |                                                                                                     |                                                                                                                                                       |
| 3 - -3        |                |      |         |              |                                                                                                     |                                                                                                                                                       |
| 4 - -4        |                |      |         |              | WASTE MATERIAL, wood, bottles, wire, cans,etc.<br>Water in trench at 5'. No batteries found.        |                                                                                                                                                       |
| 5 - -5        |                |      |         | ▼            |                                                                                                     | Sample 21TR101 collected 4.0-8.0' bgs from north end of trench. Split sample and duplicate sample collected.<br>Groundwater sample FHGW164 collected. |
| 6 - -6        |                | FL   |         |              |                                                                                                     |                                                                                                                                                       |
| 7 - -7        |                |      |         |              |                                                                                                     |                                                                                                                                                       |
| 8 - -8        |                |      |         |              | Bottom of Trench @ 8.0' bgs. Limestone layer.                                                       | Trench backfilled with removed material.                                                                                                              |
| 9 - -9        |                |      |         |              |                                                                                                     | Soil colors from Munsell Soil Color Chart, 1992 Revised Edition.                                                                                      |
| 10 -          |                |      |         |              |                                                                                                     |                                                                                                                                                       |



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Fort Worth District  
Fort Worth, Texas

## Trench FH021-TR101W

(Page 1 of 1)

SWMU FH021 : Vehicle Battery Burial Site  
Start Date : 03/20/97  
End Date : 03/20/97  
Northing Coord. : Not  
Easting Coord. : Surveyed  
Total Depth of Trench : 8.0 feet

Drilling Company : Terra-Mar  
Driller : Bill Christopher  
Designation of Drill : Kamatsu  
Type of Drill Rig : Trackhoe  
Geologist : Jeff DeVaughn  
Depth to Bedrock : Not Encountered  
Depth Drilled Into Rock: NA  
Trench Width : 3.0 feet  
Sampling Equipment : Trackhoe Bucket  
: SS Bowl and Spoons

| Depth in feet | Surf. Elev. NS | USCS | GRAPHIC | Water Levels | DESCRIPTION                                                                                                                 | REMARKS                                                          |
|---------------|----------------|------|---------|--------------|-----------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| 0 - 0         |                |      |         |              | Silty CLAY; limestone fragments; damp to dry; 2.5Y7/3 pale yellow.                                                          | Trench dug east to west from south end of TR101.                 |
| 1 - 1         |                |      |         |              |                                                                                                                             |                                                                  |
| 2 - 2         |                | CL   |         |              |                                                                                                                             |                                                                  |
| 3 - 3         |                |      |         |              |                                                                                                                             |                                                                  |
| 4 - 4         |                |      |         |              | WASTE MATERIAL, cans, bottles, wires, cables, etc.<br>Also a few empty oil cans. No batteries found. Water in trench at 5'. |                                                                  |
| 5 - 5         |                |      |         | ▼            |                                                                                                                             | Sample 21TR104 collected 4.0-8.0' bgs from trench.               |
| 6 - 6         |                | FL   |         |              |                                                                                                                             |                                                                  |
| 7 - 7         |                |      |         |              |                                                                                                                             |                                                                  |
| 8 - 8         |                |      |         |              | Bottom of Trench @ 8.0' bgs. Limestone layer.                                                                               | Trench backfilled with removed material.                         |
| 9 - 9         |                |      |         |              |                                                                                                                             | Soil colors from Munsell Soil Color Chart, 1992 Revised Edition. |
| 10 -          |                |      |         |              |                                                                                                                             |                                                                  |



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Fort Worth, Texas

### Trench FH021-TR102

(Page 1 of 1)

SWMU FH021 : Vehicle Battery Burial Site  
Start Date : 03/19/97  
End Date : 03/19/97  
Northing Coord. : Not  
Easting Coord. : Surveyed  
Total Depth of Trench : 7.0 feet

Drilling Company : Terra-Mar  
Driller : Bill Christopher  
Designation of Drill : Kamastu  
Type of Drill Rig : Trackhoe  
Geologist : Jeff DeVaughn  
Depth to Bedrock : Not Encountered  
Depth Drilled Into Rock: NA  
Trench Width : 3.0 feet  
Sampling Equipment : Trackhoe Bucket  
: SS Bowl and Spoons

| Depth in feet | Surf. Elev. NS | USCS | GRAPHIC | Water Levels | DESCRIPTION                                                                                                | REMARKS                                                          |
|---------------|----------------|------|---------|--------------|------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| 0 - 0         |                |      |         |              | Silty CLAY; limestone fragments; damp to dry; 2.5Y7/3 pale yellow.                                         |                                                                  |
| 1 - -1        | CL             |      |         |              |                                                                                                            |                                                                  |
| 2 - -2        |                |      |         |              | WASTE MATERIAL, abundant railroad ties, cans, bottles, wire. No batteries found. Water in trench below 3'. |                                                                  |
| 3 - -3        |                |      |         | ▼            |                                                                                                            |                                                                  |
| 4 - -4        |                |      |         |              |                                                                                                            |                                                                  |
| 5 - -5        |                |      |         |              |                                                                                                            | Sample 21TR102 collected 2.0-7.0' bgs from center of the trench. |
| 6 - -6        |                |      |         |              |                                                                                                            |                                                                  |
| 7 - -7        |                |      |         |              | Bottom of Trench @ 7.0' bgs. Limestone layer.                                                              |                                                                  |
| 8 - -8        |                |      |         |              |                                                                                                            | Trench backfilled with removed material.                         |
| 9 - -9        |                |      |         |              |                                                                                                            | Soil colors from Munsell Soil Color Chart, 1992 Revised Edition. |
| 10 -          |                |      |         |              |                                                                                                            |                                                                  |



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Fort Worth District  
Fort Worth, Texas

## Trench FH021-TR102E

(Page 1 of 1)

SWMU FH021 : Vehicle Battery Burial Site  
Start Date : 03/20/97  
End Date : 03/20/97  
Northing Coord. : Not  
Easting Coord. : Surveyed  
Total Depth of Trench : 7.0 feet

Drilling Company : Terra-Mar  
Driller : Bill Christopher  
Designation of Drill : Kamastu  
Type of Drill Rig : Trackhoe  
Geologist : Jeff DeVaughn  
Depth to Bedrock : Not Encountered  
Depth Drilled Into Rock: NA  
Trench Width : 3.0 feet  
Sampling Equipment : Trackhoe Bucket  
: SS Bowl and Spoons

| Depth in feet | Surf. Elev. | USCS | GRAPHIC | Water Levels | DESCRIPTION                                                                                                                                                                                              | REMARKS                                                                                        |
|---------------|-------------|------|---------|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| 0 - 0         |             |      |         |              | Silty CLAY; limestone fragments/cobbles; damp to dry; 2.5Y7/3 pale yellow.                                                                                                                               |                                                                                                |
| 1 - -1        | CL          |      |         |              |                                                                                                                                                                                                          |                                                                                                |
| 2 - -2        |             |      |         | ▼            | Water flowing into trench at 2'.<br><br>WASTE MATERIAL, railroad ties, bottles, cans, glass, large oil cans (empty), metal locker doors, wire, etc. No batteries found. Oil sheen noted on some timbers. |                                                                                                |
| 3 - -3        |             |      |         |              |                                                                                                                                                                                                          |                                                                                                |
| 4 - -4        |             |      |         |              |                                                                                                                                                                                                          |                                                                                                |
| 5 - -5        | FL          |      |         |              |                                                                                                                                                                                                          | Sample 21TR103 collected from east end of trench.<br><br>Groundwater sample FHWG165 collected. |
| 6 - -6        |             |      |         |              |                                                                                                                                                                                                          |                                                                                                |
| 7 - -7        |             |      |         |              | Bottom of Trench @ 7.0' bgs. Limestone layer.                                                                                                                                                            |                                                                                                |
| 8 - -8        |             |      |         |              |                                                                                                                                                                                                          | Trench backfilled with removed material.                                                       |
| 9 - -9        |             |      |         |              |                                                                                                                                                                                                          | Soil colors from Munsell Soil Color Chart, 1992 Revised Edition.                               |
| 10 -          |             |      |         |              |                                                                                                                                                                                                          |                                                                                                |

## **APPENDIX B**

### **FH-021 Analytical Results**

## FH-021 Analytical Results

| Location | Sample ID | COE Sample ID                | Date Collected | Depth   | CAS Number | Parameter                    | Result | Detection Limit | Units of Measure | Lab * Qual | Data ** Qual | Method     |
|----------|-----------|------------------------------|----------------|---------|------------|------------------------------|--------|-----------------|------------------|------------|--------------|------------|
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 7440-38-2  | Arsenic                      | 3.2    | 0.40            | mg/kg            |            |              | SW846 6010 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 7440-39-3  | Barium                       | 81.5   | 0.08            | mg/kg            |            |              | SW846 6010 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 7440-43-9  | Cadmium                      | 0.62   | 0.06            | mg/kg            | B          |              | SW846 6010 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 7440-47-3  | Chromium                     | 12.3   | 0.09            | mg/kg            |            |              | SW846 6010 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 7439-92-1  | Lead                         | 23     | 0.23            | mg/kg            |            |              | SW846 6010 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 7439-97-6  | Mercury                      | 0.04   | 0.04            | mg/kg            | U          | U            | SW846 6010 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 7782-49-2  | Selenium                     | 1.4    | 1.4             | mg/kg            | UWN        | UJ           | SW846 6010 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 7440-22-4  | Silver                       | 0.22   | 0.22            | mg/kg            | U          | U            | SW846 6010 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 95-94-3    | 1,2,4,5-Tetrachlorobenzene   | 430    | 430             | ug/kg            | U          | U            | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 120-82-1   | 1,2,4-Trichlorobenzene       | 430    | 430             | ug/kg            | U          | U            | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 95-50-1    | 1,2-Dichlorobenzene          | 430    | 430             | ug/kg            | U          | U            | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 541-73-1   | 1,3-Dichlorobenzene          | 430    | 430             | ug/kg            | U          | U            | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 106-46-7   | 1,4-Dichlorobenzene          | 430    | 430             | ug/kg            | U          | U            | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 108-60-1   | 2,2'-oxybis(1-chloropropane) | 430    | 430             | ug/kg            | U          | U            | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 95-95-4    | 2,4,5-Trichlorophenol        | 2100   | 2100            | ug/kg            | U          | U            | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 88-06-2    | 2,4,6-Trichlorophenol        | 430    | 430             | ug/kg            | U          | U            | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 120-83-2   | 2,4-Dichlorophenol           | 430    | 430             | ug/kg            | U          | U            | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 105-67-9   | 2,4-Dimethylphenol           | 430    | 430             | ug/kg            | U          | U            | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 51-28-5    | 2,4-Dinitrophenol            | 2100   | 2100            | ug/kg            | U          | U            | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 121-14-2   | 2,4-Dinitrotoluene           | 430    | 430             | ug/kg            | U          | U            | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 606-20-2   | 2,6-Dinitrotoluene           | 430    | 430             | ug/kg            | U          | U            | SW846 8270 |

| Location | Sample ID | COE Sample ID                | Date Collected | Depth   | CAS Number | Parameter                  | Result | Detection Limit | Units of Measure | Lab * Qual | Data** Qual | Method     |
|----------|-----------|------------------------------|----------------|---------|------------|----------------------------|--------|-----------------|------------------|------------|-------------|------------|
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 91-58-7    | 2-Chloronaphthalene        | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 95-57-8    | 2-Chlorophenol             | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 91-57-6    | 2-Methylnaphthalene        | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 95-48-7    | 2-Methylphenol             | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 88-74-4    | 2-Nitroaniline             | 2100   | 2100            | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 88-75-5    | 2-Nitrophenol              | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 91-94-1    | 3,3'-Dichlorobenzidine     | 860    | 860             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 99-09-2    | 3-Nitroaniline             | 2100   | 2100            | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 534-52-1   | 4,6-Dinitro-o-Cresol       | 2100   | 2100            | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 101-55-3   | 4-Bromophenyl-phenyl Ether | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 106-47-8   | 4-Chloroaniline            | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 7005-72-3  | 4-Chlorophenyl-phenylether | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 106-44-5   | 4-Methylphenol             | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 100-01-6   | 4-Nitroaniline             | 2100   | 2100            | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 100-02-7   | 4-Nitrophenol              | 2100   | 2100            | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 59-50-7    | 4-chloro-3-methylphenol    | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 83-32-9    | Acenaphthene               | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 208-96-8   | Acenaphthylene             | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 120-12-7   | Anthracene                 | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 56-55-3    | Benzo(a)anthracene         | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 50-32-8    | Benzo(a)pyrene             | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 205-99-2   | Benzo(b)fluoranthene       | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 191-24-2   | Benzo(g,h,i)perylene       | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |

| Location | Sample ID | COE Sample ID                | Date Collected | Depth   | CAS Number | Parameter                  | Result | Detection Limit | Units of Measure | Lab * Qual | Data** Qual | Method     |
|----------|-----------|------------------------------|----------------|---------|------------|----------------------------|--------|-----------------|------------------|------------|-------------|------------|
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 207-08-9   | Benzo(k)fluoranthene       | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 65-85-0    | Benzoic Acid               | 2100   | 2100            | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 100-51-6   | Benzyl Alcohol             | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 111-91-1   | Bis(2-chloroethoxy)methane | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 111-44-4   | Bis(2-chloroethyl)ether    | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 117-81-7   | Bis(2-ethylhexyl)phthalate | 45     | 430             | ug/kg            | J          | J           | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 85-68-7    | Butyl Benzyl Phthalate     | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 218-01-9   | Chrysene                   | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 84-74-2    | Di-n-butyl Phthalate       | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 117-84-0   | Di-n-octyl Phthalate       | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 53-70-3    | Dibenz(a,h)anthracene      | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 132-64-9   | Dibenzofuran               | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 84-66-2    | Diethyl Phthalate          | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 131-11-3   | Dimethyl Phthalate         | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 206-44-0   | Fluoranthene               | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 86-73-7    | Fluorene                   | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 118-74-1   | Hexachlorobenzene          | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 87-68-3    | Hexachlorobutadiene        | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 77-47-4    | Hexachlorocyclopentadiene  | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 67-72-1    | Hexachloroethane           | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 193-39-5   | Indeno(1,2,3-cd)pyrene     | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 78-59-1    | Isophorone                 | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 621-64-7   | N-Nitroso-di-n-propylamine | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |

| Location | Sample ID | COE Sample ID                | Date Collected | Depth   | CAS Number | Parameter                 | Result | Detection Limit | Units of Measure | Lab * Qual | Data** Qual | Method     |
|----------|-----------|------------------------------|----------------|---------|------------|---------------------------|--------|-----------------|------------------|------------|-------------|------------|
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 86-30-6    | N-Nitrosodiphenylamine    | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 91-20-3    | Naphthalene               | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 98-95-3    | Nitrobenzene              | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 87-86-5    | Pentachlorophenol         | 2100   | 2100            | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 85-01-8    | Phenanthrene              | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 108-95-2   | Phenol                    | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 129-00-0   | Pyrene                    | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 110-86-1   | Pyridine                  | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 630-20-6   | 1,1,1,2-Tetrachloroethane | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 71-55-6    | 1,1,1-Trichloroethane     | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 79-34-5    | 1,1,2,2-Tetrachloroethane | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 79-00-5    | 1,1,2-Trichloroethane     | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 75-34-3    | 1,1-Dichloroethane        | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 75-35-4    | 1,1-Dichloroethene        | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 563-58-6   | 1,1-Dichloropropene       | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 87-61-6    | 1,2,3-Trichlorobenzene    | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 96-18-4    | 1,2,3-Trichloropropane    | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 120-82-1   | 1,2,4-Trichlorobenzene    | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 95-63-6    | 1,2,4-trimethylbenzene    | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 106-93-4   | 1,2-Dibromoethane         | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 95-50-1    | 1,2-Dichlorobenzene       | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 107-06-2   | 1,2-Dichloroethane        | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 78-87-5    | 1,2-Dichloropropane       | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |

| Location | Sample ID | COE Sample ID                | Date Collected | Depth   | CAS Number | Parameter                   | Result | Detection Limit | Units of Measure | Lab * Qual | Data** Qual | Method     |
|----------|-----------|------------------------------|----------------|---------|------------|-----------------------------|--------|-----------------|------------------|------------|-------------|------------|
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 156-59-2   | 1,2-cis-Dichloroethene      | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 96-12-8    | 1,2-dibromo-3-chloropropane | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 156-60-5   | 1,2-trans-Dichloroethene    | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 108-67-8   | 1,3,5-trimethylbenzene      | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 541-73-1   | 1,3-Dichlorobenzene         | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 142-28-9   | 1,3-Dichloropropane         | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 106-46-7   | 1,4-Dichlorobenzene         | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 594-20-7   | 2,2-Dichloropropane         | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 78-93-3    | 2-Butanone                  | 5      | 6               | ug/kg            | J          | J           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 95-49-8    | 2-Chlorotoluene             | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 591-78-6   | 2-Hexanone                  | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 106-43-4   | 4-Chlorotoluene             | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 108-10-1   | 4-Methyl-2-pentanone        | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 67-64-1    | Acetone                     | 59     | 6               | ug/kg            |            | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 71-43-2    | Benzene                     | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 108-86-1   | Bromobenzene                | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 74-97-5    | Bromochloromethane          | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 75-27-4    | Bromodichloromethane        | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 75-25-2    | Bromoform                   | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 74-83-9    | Bromomethane                | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 56-23-5    | Carbon Tetrachloride        | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 108-90-7   | Chlorobenzene               | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 75-00-3    | Chloroethane                | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |

| Location | Sample ID | COE Sample ID                | Date Collected | Depth   | CAS Number | Parameter               | Result | Detection Limit | Units of Measure | Lab * Qual | Data** Qual | Method     |
|----------|-----------|------------------------------|----------------|---------|------------|-------------------------|--------|-----------------|------------------|------------|-------------|------------|
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 67-66-3    | Chloroform              | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 74-87-3    | Chloromethane           | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 124-48-1   | Dibromochloromethane    | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 74-95-3    | Dibromomethane          | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 75-71-8    | Dichlorodifluoromethane | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 100-41-4   | Ethylbenzene            | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 87-68-3    | Hexachlorobutadiene     | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 98-82-8    | Isopropyl Benzene       | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 75-09-2    | Methylene Chloride      | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 91-20-3    | Naphthalene             | 3      | 6               | ug/kg            | J          | J           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 100-42-5   | Styrene                 | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 127-18-4   | Tetrachloroethene       | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 108-88-3   | Toluene                 | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 79-01-6    | Trichloroethene         | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 75-69-4    | Trichlorofluoromethane  | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 75-01-4    | Vinyl Chloride          | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 13-302-07  | m,p-Xylene              | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 104-51-8   | n-Butylbenzene          | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 103-65-1   | n-propylbenzene         | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 95-47-6    | o-Xylene                | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 99-87-6    | p-Isopropyltoluene      | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 135-98-8   | sec-Butylbenzene        | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | 21TR101   | FH021-TR101/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 98-06-6    | tert-Butylbenzene       | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |

| Location | Sample ID | COE Sample ID        | Date Collected | Depth   | CAS Number | Parameter                    | Result | Detection Limit | Units of Measure | Lab * Qual | Data** Qual | Method     |
|----------|-----------|----------------------|----------------|---------|------------|------------------------------|--------|-----------------|------------------|------------|-------------|------------|
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 7440-38-2  | Arsenic                      | 4.8    | 2.1             | ug/l             | B          |             | SW846 6010 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 7440-39-3  | Barium                       | 314    | 0.30            | ug/l             |            |             | SW846 6010 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 7440-43-9  | Cadmium                      | 0.3    | 0.30            | ug/l             | U          | U           | SW846 6010 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 7440-47-3  | Chromium                     | 1      | 1.0             | ug/l             | U          | U           | SW846 6010 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 7439-92-1  | Lead                         | 0.9    | 0.90            | ug/l             | U          | U           | SW846 6010 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 7439-97-6  | Mercury                      | 0.1    | 0.10            | ug/l             | U          | U           | SW846 6010 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 7782-49-2  | Selenium                     | 8.2    | 2.2             | ug/l             | S          | J           | SW846 6010 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 7440-22-4  | Silver                       | 1      | 1.0             | ug/l             | U          | U           | SW846 6010 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 95-94-3    | 1,2,4,5-Tetrachlorobenzene   | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 120-82-1   | 1,2,4-Trichlorobenzene       | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 95-50-1    | 1,2-Dichlorobenzene          | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 541-73-1   | 1,3-Dichlorobenzene          | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 106-46-7   | 1,4-Dichlorobenzene          | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 108-60-1   | 2,2'-oxybis(1-chloropropane) | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 95-95-4    | 2,4,5-Trichlorophenol        | 50     | 50              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 88-06-2    | 2,4,6-Trichlorophenol        | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 120-83-2   | 2,4-Dichlorophenol           | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 105-67-9   | 2,4-Dimethylphenol           | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 51-28-5    | 2,4-Dinitrophenol            | 50     | 50              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 121-14-2   | 2,4-Dinitrotoluene           | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 606-20-2   | 2,6-Dinitrotoluene           | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 91-58-7    | 2-Chloronaphthalene          | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 95-57-8    | 2-Chlorophenol               | 10     | 10              | ug/l             | U          | U           | SW846 8270 |

| Location | Sample ID | COE Sample ID        | Date Collected | Depth   | CAS Number | Parameter                  | Result | Detection Limit | Units of Measure | Lab * Qual | Data** Qual | Method     |
|----------|-----------|----------------------|----------------|---------|------------|----------------------------|--------|-----------------|------------------|------------|-------------|------------|
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 91-57-6    | 2-Methylnaphthalene        | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 95-48-7    | 2-Methylphenol             | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 88-74-4    | 2-Nitroaniline             | 50     | 50              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 88-75-5    | 2-Nitrophenol              | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 91-94-1    | 3,3'-Dichlorobenzidine     | 20     | 20              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 99-09-2    | 3-Nitroaniline             | 50     | 50              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 534-52-1   | 4,6-Dinitro-o-Cresol       | 50     | 50              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 101-55-3   | 4-Bromophenyl-phenyl Ether | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 106-47-8   | 4-Chloroaniline            | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 7005-72-3  | 4-Chlorophenyl-phenylether | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 106-44-5   | 4-Methylphenol             | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 100-01-6   | 4-Nitroaniline             | 50     | 50              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 100-02-7   | 4-Nitrophenol              | 50     | 50              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 59-50-7    | 4-chloro-3-methylphenol    | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 83-32-9    | Acenaphthene               | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 208-96-8   | Acenaphthylene             | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 120-12-7   | Anthracene                 | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 56-55-3    | Benzo(a)anthracene         | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 50-32-8    | Benzo(a)pyrene             | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 205-99-2   | Benzo(b)fluoranthene       | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 191-24-2   | Benzo(g,h,i)perylene       | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 207-08-9   | Benzo(k)fluoranthene       | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 65-85-0    | Benzoic Acid               | 50     | 50              | ug/l             | U          | U           | SW846 8270 |

| Location | Sample ID | COE Sample ID        | Date Collected | Depth   | CAS Number | Parameter                  | Result | Detection Limit | Units of Measure | Lab * Qual | Data** Qual | Method     |
|----------|-----------|----------------------|----------------|---------|------------|----------------------------|--------|-----------------|------------------|------------|-------------|------------|
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 100-51-6   | Benzyl Alcohol             | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 111-91-1   | Bis(2-chloroethoxy)methane | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 111-44-4   | Bis(2-chloroethyl)ether    | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 117-81-7   | Bis(2-ethylhexyl)phthalate | 4      | 10              | ug/l             | J          | J           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 85-68-7    | Butyl Benzyl Phthalate     | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 218-01-9   | Chrysene                   | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 84-74-2    | Di-n-butyl Phthalate       | 2      | 10              | ug/l             | J          | J           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 117-84-0   | Di-n-octyl Phthalate       | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 53-70-3    | Dibenz(a,h)anthracene      | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 132-64-9   | Dibenzofuran               | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 84-66-2    | Diethyl Phthalate          | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 131-11-3   | Dimethyl Phthalate         | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 206-44-0   | Fluoranthene               | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 86-73-7    | Fluorene                   | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 118-74-1   | Hexachlorobenzene          | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 87-68-3    | Hexachlorobutadiene        | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 77-47-4    | Hexachlorocyclopentadiene  | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 67-72-1    | Hexachloroethane           | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 193-39-5   | Indeno(1,2,3-cd)pyrene     | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 78-59-1    | Isophorone                 | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 621-64-7   | N-Nitroso-di-n-propylamine | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 86-30-6    | N-Nitrosodiphenylamine     | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 91-20-3    | Naphthalene                | 10     | 10              | ug/l             | U          | U           | SW846 8270 |

| Location | Sample ID | COE Sample ID        | Date Collected | Depth   | CAS Number | Parameter                   | Result | Detection Limit | Units of Measure | Lab * Qual | Data** Qual | Method     |
|----------|-----------|----------------------|----------------|---------|------------|-----------------------------|--------|-----------------|------------------|------------|-------------|------------|
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 98-95-3    | Nitrobenzene                | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 87-86-5    | Pentachlorophenol           | 50     | 50              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 85-01-8    | Phenanthrene                | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 108-95-2   | Phenol                      | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 129-00-0   | Pyrene                      | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 110-86-1   | Pyridine                    | 50     | 50              | ug/l             | U          | U           | SW846 8270 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 630-20-6   | 1,1,1,2-Tetrachloroethane   | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 71-55-6    | 1,1,1-Trichloroethane       | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 79-34-5    | 1,1,2,2-Tetrachloroethane   | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 79-00-5    | 1,1,2-Trichloroethane       | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 75-34-3    | 1,1-Dichloroethane          | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 75-35-4    | 1,1-Dichloroethene          | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 563-58-6   | 1,1-Dichloropropene         | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 87-61-6    | 1,2,3-Trichlorobenzene      | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 96-18-4    | 1,2,3-Trichloropropane      | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 120-82-1   | 1,2,4-Trichlorobenzene      | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 95-63-6    | 1,2,4-trimethylbenzene      | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 106-93-4   | 1,2-Dibromoethane           | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 95-50-1    | 1,2-Dichlorobenzene         | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 107-06-2   | 1,2-Dichloroethane          | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 78-87-5    | 1,2-Dichloropropane         | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 156-59-2   | 1,2-cis-Dichloroethene      | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 96-12-8    | 1,2-dibromo-3-chloropropane | 5      | 5               | ug/l             | U          | U           | SW846 8260 |

| Location | Sample ID | COE Sample ID        | Date Collected | Depth   | CAS Number | Parameter                | Result | Detection Limit | Units of Measure | Lab * Qual | Data** Qual | Method     |
|----------|-----------|----------------------|----------------|---------|------------|--------------------------|--------|-----------------|------------------|------------|-------------|------------|
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 156-60-5   | 1,2-trans-Dichloroethene | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 108-67-8   | 1,3,5-trimethylbenzene   | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 541-73-1   | 1,3-Dichlorobenzene      | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 142-28-9   | 1,3-Dichloropropane      | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 106-46-7   | 1,4-Dichlorobenzene      | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 594-20-7   | 2,2-Dichloropropane      | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 78-93-3    | 2-Butanone               | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 95-49-8    | 2-Chlorotoluene          | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 591-78-6   | 2-Hexanone               | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 106-43-4   | 4-Chlorotoluene          | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 108-10-1   | 4-Methyl-2-pentanone     | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 67-64-1    | Acetone                  | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 71-43-2    | Benzene                  | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 108-86-1   | Bromobenzene             | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 74-97-5    | Bromochloromethane       | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 75-27-4    | Bromodichloromethane     | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 75-25-2    | Bromoform                | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 74-83-9    | Bromomethane             | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 56-23-5    | Carbon Tetrachloride     | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 108-90-7   | Chlorobenzene            | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 75-00-3    | Chloroethane             | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 67-66-3    | Chloroform               | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97 | 03/19/1997     | 0.0-0.0 | 74-87-3    | Chloromethane            | 5      | 5               | ug/l             | U          | U           | SW846 8260 |

| Location | Sample ID | COE Sample ID                | Date Collected | Depth   | CAS Number | Parameter               | Result | Detection Limit | Units of Measure | Lab * Qual | Data** Qual | Method     |
|----------|-----------|------------------------------|----------------|---------|------------|-------------------------|--------|-----------------|------------------|------------|-------------|------------|
| TR101E   | FHGW164   | FH021-GW164/03-19-97         | 03/19/1997     | 0.0-0.0 | 124-48-1   | Dibromochloromethane    | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97         | 03/19/1997     | 0.0-0.0 | 74-95-3    | Dibromomethane          | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97         | 03/19/1997     | 0.0-0.0 | 75-71-8    | Dichlorodifluoromethane | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97         | 03/19/1997     | 0.0-0.0 | 100-41-4   | Ethylbenzene            | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97         | 03/19/1997     | 0.0-0.0 | 87-68-3    | Hexachlorobutadiene     | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97         | 03/19/1997     | 0.0-0.0 | 98-82-8    | Isopropyl Benzene       | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97         | 03/19/1997     | 0.0-0.0 | 75-09-2    | Methylene Chloride      | 5      | 5               | ug/l             |            | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97         | 03/19/1997     | 0.0-0.0 | 91-20-3    | Naphthalene             | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97         | 03/19/1997     | 0.0-0.0 | 100-42-5   | Styrene                 | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97         | 03/19/1997     | 0.0-0.0 | 127-18-4   | Tetrachloroethene       | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97         | 03/19/1997     | 0.0-0.0 | 108-88-3   | Toluene                 | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97         | 03/19/1997     | 0.0-0.0 | 79-01-6    | Trichloroethene         | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97         | 03/19/1997     | 0.0-0.0 | 75-69-4    | Trichlorofluoromethane  | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97         | 03/19/1997     | 0.0-0.0 | 75-01-4    | Vinyl Chloride          | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97         | 03/19/1997     | 0.0-0.0 | 13-302-07  | m,p-Xylene              | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97         | 03/19/1997     | 0.0-0.0 | 104-51-8   | n-Butylbenzene          | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97         | 03/19/1997     | 0.0-0.0 | 103-65-1   | n-propylbenzene         | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97         | 03/19/1997     | 0.0-0.0 | 95-47-6    | o-Xylene                | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97         | 03/19/1997     | 0.0-0.0 | 99-87-6    | p-Isopropyltoluene      | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97         | 03/19/1997     | 0.0-0.0 | 135-98-8   | sec-Butylbenzene        | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHGW164   | FH021-GW164/03-19-97         | 03/19/1997     | 0.0-0.0 | 98-06-6    | tert-Butylbenzene       | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 7440-38-2  | Arsenic                 | 4.7    | 0.41            | mg/kg            |            |             | SW846 6010 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 7440-39-3  | Barium                  | 85.3   | 0.08            | mg/kg            |            |             | SW846 6010 |

| Location | Sample ID | COE Sample ID                | Date Collected | Depth   | CAS Number | Parameter                    | Result | Detection Limit | Units of Measure | Lab * Qual | Data** Qual | Method     |
|----------|-----------|------------------------------|----------------|---------|------------|------------------------------|--------|-----------------|------------------|------------|-------------|------------|
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 7440-43-9  | Cadmium                      | 0.89   | 0.07            | mg/kg            |            |             | SW846 6010 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 7440-47-3  | Chromium                     | 13.7   | 0.09            | mg/kg            |            |             | SW846 6010 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 7439-92-1  | Lead                         | 37.8   | 0.24            | mg/kg            |            |             | SW846 6010 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 7439-97-6  | Mercury                      | 0.09   | 0.04            | mg/kg            |            |             | SW846 6010 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 7782-49-2  | Selenium                     | 1.5    | 1.5             | mg/kg            | UWM N      | UJ          | SW846 6010 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 7440-22-4  | Silver                       | 0.23   | 0.23            | mg/kg            | U          | U           | SW846 6010 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 95-94-3    | 1,2,4,5-Tetrachlorobenzene   | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 120-82-1   | 1,2,4-Trichlorobenzene       | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 95-50-1    | 1,2-Dichlorobenzene          | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 541-73-1   | 1,3-Dichlorobenzene          | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 106-46-7   | 1,4-Dichlorobenzene          | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 108-60-1   | 2,2'-oxybis(1-chloropropane) | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 95-95-4    | 2,4,5-Trichlorophenol        | 2100   | 2100            | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 88-06-2    | 2,4,6-Trichlorophenol        | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 120-83-2   | 2,4-Dichlorophenol           | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 105-67-9   | 2,4-Dimethylphenol           | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 51-28-5    | 2,4-Dinitrophenol            | 2100   | 2100            | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 121-14-2   | 2,4-Dinitrotoluene           | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 606-20-2   | 2,6-Dinitrotoluene           | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 91-58-7    | 2-Chloronaphthalene          | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 95-57-8    | 2-Chlorophenol               | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 91-57-6    | 2-Methylnaphthalene          | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |

| Location | Sample ID | COE Sample ID                | Date Collected | Depth   | CAS Number | Parameter                  | Result | Detection Limit | Units of Measure | Lab * Qual | Data** Qual | Method     |
|----------|-----------|------------------------------|----------------|---------|------------|----------------------------|--------|-----------------|------------------|------------|-------------|------------|
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 95-48-7    | 2-Methylphenol             | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 88-74-4    | 2-Nitroaniline             | 2100   | 2100            | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 88-75-5    | 2-Nitrophenol              | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 91-94-1    | 3,3'-Dichlorobenzidine     | 870    | 870             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 99-09-2    | 3-Nitroaniline             | 2100   | 2100            | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 534-52-1   | 4,6-Dinitro-o-Cresol       | 2100   | 2100            | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 101-55-3   | 4-Bromophenyl-phenyl Ether | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 106-47-8   | 4-Chloroaniline            | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 7005-72-3  | 4-Chlorophenyl-phenylether | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 106-44-5   | 4-Methylphenol             | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 100-01-6   | 4-Nitroaniline             | 2100   | 2100            | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 100-02-7   | 4-Nitrophenol              | 2100   | 2100            | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 59-50-7    | 4-chloro-3-methylphenol    | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 83-32-9    | Acenaphthene               | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 208-96-8   | Acenaphthylene             | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 120-12-7   | Anthracene                 | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 56-55-3    | Benzo(a)anthracene         | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 50-32-8    | Benzo(a)pyrene             | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 205-99-2   | Benzo(b)fluoranthene       | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 191-24-2   | Benzo(g,h,i)perylene       | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 207-08-9   | Benzo(k)fluoranthene       | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 65-85-0    | Benzoic Acid               | 2100   | 2100            | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 100-51-6   | Benzyl Alcohol             | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |

| Location | Sample ID | COE Sample ID                | Date Collected | Depth   | CAS Number | Parameter                  | Result | Detection Limit | Units of Measure | Lab * Qual | Data** Qual | Method     |
|----------|-----------|------------------------------|----------------|---------|------------|----------------------------|--------|-----------------|------------------|------------|-------------|------------|
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 111-91-1   | Bis(2-chloroethoxy)methane | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 111-44-4   | Bis(2-chloroethyl)ether    | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 117-81-7   | Bis(2-ethylhexyl)phthalate | 180    | 430             | ug/kg            | J          | J           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 85-68-7    | Butyl Benzyl Phthalate     | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 218-01-9   | Chrysene                   | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 84-74-2    | Di-n-butyl Phthalate       | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 117-84-0   | Di-n-octyl Phthalate       | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 53-70-3    | Dibenz(a,h)anthracene      | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 132-64-9   | Dibenzofuran               | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 84-66-2    | Diethyl Phthalate          | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 131-11-3   | Dimethyl Phthalate         | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 206-44-0   | Fluoranthene               | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 86-73-7    | Fluorene                   | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 118-74-1   | Hexachlorobenzene          | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 87-68-3    | Hexachlorobutadiene        | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 77-47-4    | Hexachlorocyclopentadiene  | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 67-72-1    | Hexachloroethane           | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 193-39-5   | Indeno(1,2,3-cd)pyrene     | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 78-59-1    | Isophorone                 | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 621-64-7   | N-Nitroso-di-n-propylamine | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 86-30-6    | N-Nitrosodiphenylamine     | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 91-20-3    | Naphthalene                | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 98-95-3    | Nitrobenzene               | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |

| Location | Sample ID | COE Sample ID                | Date Collected | Depth   | CAS Number | Parameter                   | Result | Detection Limit | Units of Measure | Lab * Qual | Data** Qual | Method     |
|----------|-----------|------------------------------|----------------|---------|------------|-----------------------------|--------|-----------------|------------------|------------|-------------|------------|
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 87-86-5    | Pentachlorophenol           | 2100   | 2100            | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 85-01-8    | Phenanthrene                | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 108-95-2   | Phenol                      | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 129-00-0   | Pyrene                      | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 110-86-1   | Pyridine                    | 430    | 430             | ug/kg            | U          | U           | SW846 8270 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 630-20-6   | 1,1,1,2-Tetrachloroethane   | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 71-55-6    | 1,1,1-Trichloroethane       | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 79-34-5    | 1,1,2,2-Tetrachloroethane   | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 79-00-5    | 1,1,2-Trichloroethane       | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 75-34-3    | 1,1-Dichloroethane          | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 75-35-4    | 1,1-Dichloroethene          | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 563-58-6   | 1,1-Dichloropropene         | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 87-61-6    | 1,2,3-Trichlorobenzene      | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 96-18-4    | 1,2,3-Trichloropropane      | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 120-82-1   | 1,2,4-Trichlorobenzene      | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 95-63-6    | 1,2,4-trimethylbenzene      | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 106-93-4   | 1,2-Dibromoethane           | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 95-50-1    | 1,2-Dichlorobenzene         | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 107-06-2   | 1,2-Dichloroethane          | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 78-87-5    | 1,2-Dichloropropane         | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 156-59-2   | 1,2-cis-Dichloroethene      | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 96-12-8    | 1,2-dibromo-3-chloropropane | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 156-60-5   | 1,2-trans-Dichloroethene    | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |

| Location | Sample ID | COE Sample ID                | Date Collected | Depth   | CAS Number | Parameter              | Result | Detection Limit | Units of Measure | Lab * Qual | Data** Qual | Method     |
|----------|-----------|------------------------------|----------------|---------|------------|------------------------|--------|-----------------|------------------|------------|-------------|------------|
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 108-67-8   | 1,3,5-trimethylbenzene | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 541-73-1   | 1,3-Dichlorobenzene    | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 142-28-9   | 1,3-Dichloropropane    | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 106-46-7   | 1,4-Dichlorobenzene    | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 594-20-7   | 2,2-Dichloropropane    | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 78-93-3    | 2-Butanone             | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 95-49-8    | 2-Chlorotoluene        | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 591-78-6   | 2-Hexanone             | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 106-43-4   | 4-Chlorotoluene        | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 108-10-1   | 4-Methyl-2-pentanone   | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 67-64-1    | Acetone                | 31     | 6               | ug/kg            | B          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 71-43-2    | Benzene                | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 108-86-1   | Bromobenzene           | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 74-97-5    | Bromochloromethane     | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 75-27-4    | Bromodichloromethane   | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 75-25-2    | Bromoform              | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 74-83-9    | Bromomethane           | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 56-23-5    | Carbon Tetrachloride   | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 108-90-7   | Chlorobenzene          | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 75-00-3    | Chloroethane           | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 67-66-3    | Chloroform             | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 74-87-3    | Chloromethane          | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 124-48-1   | Dibromochloromethane   | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |

| Location | Sample ID | COE Sample ID                | Date Collected | Depth   | CAS Number | Parameter               | Result | Detection Limit | Units of Measure | Lab * Qual | Data** Qual | Method     |
|----------|-----------|------------------------------|----------------|---------|------------|-------------------------|--------|-----------------|------------------|------------|-------------|------------|
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 74-95-3    | Dibromomethane          | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 75-71-8    | Dichlorodifluoromethane | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 100-41-4   | Ethylbenzene            | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 87-68-3    | Hexachlorobutadiene     | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 98-82-8    | Isopropyl Benzene       | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 75-09-2    | Methylene Chloride      | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 91-20-3    | Naphthalene             | 3      | 6               | ug/kg            | J          | J           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 100-42-5   | Styrene                 | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 127-18-4   | Tetrachloroethene       | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 108-88-3   | Toluene                 | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 79-01-6    | Trichloroethene         | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 75-69-4    | Trichlorofluoromethane  | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 75-01-4    | Vinyl Chloride          | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 13-302-07  | m,p-Xylene              | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 104-51-8   | n-Butylbenzene          | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 103-65-1   | n-propylbenzene         | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 95-47-6    | o-Xylene                | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 99-87-6    | p-Isopropyltoluene      | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 135-98-8   | sec-Butylbenzene        | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101E   | FHSB238   | FH021-SB238/03-19-97/7.5-8.0 | 03/19/1997     | 2.0-8.0 | 98-06-6    | tert-Butylbenzene       | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 7440-38-2  | Arsenic                 | 3.3    | 0.36            | mg/kg            |            |             | SW846 6010 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 7440-39-3  | Barium                  | 58.9   | 0.07            | mg/kg            |            |             | SW846 6010 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 7440-43-9  | Cadmium                 | 0.21   | 0.06            | mg/kg            | B          |             | SW846 6010 |

| Location | Sample ID | COE Sample ID                | Date Collected | Depth   | CAS Number | Parameter                    | Result | Detection Limit | Units of Measure | Lab * Qual | Data** Qual | Method     |
|----------|-----------|------------------------------|----------------|---------|------------|------------------------------|--------|-----------------|------------------|------------|-------------|------------|
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 7440-47-3  | Chromium                     | 8.9    | 0.08            | mg/kg            |            |             | SW846 6010 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 7439-92-1  | Lead                         | 7.2    | 0.21            | mg/kg            |            |             | SW846 6010 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 7439-97-6  | Mercury                      | 0.04   | 0.04            | mg/kg            | U          | U           | SW846 7470 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 7782-49-2  | Selenium                     | 1.3    | 1.3             | mg/kg            | UW         | UJ          | SW846 7740 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 7440-22-4  | Silver                       | 0.2    | 0.20            | mg/kg            | U          | U           | SW846 6010 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 95-94-3    | 1,2,4,5-Tetrachlorobenzene   | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 120-82-1   | 1,2,4-Trichlorobenzene       | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 95-50-1    | 1,2-Dichlorobenzene          | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 541-73-1   | 1,3-Dichlorobenzene          | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 106-46-7   | 1,4-Dichlorobenzene          | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 108-60-1   | 2,2'-oxybis(1-chloropropane) | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 95-95-4    | 2,4,5-Trichlorophenol        | 1900   | 1900            | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 88-06-2    | 2,4,6-Trichlorophenol        | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 120-83-2   | 2,4-Dichlorophenol           | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 105-67-9   | 2,4-Dimethylphenol           | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 51-28-5    | 2,4-Dinitrophenol            | 1900   | 1900            | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 121-14-2   | 2,4-Dinitrotoluene           | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 606-20-2   | 2,6-Dinitrotoluene           | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 91-58-7    | 2-Chloronaphthalene          | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 95-57-8    | 2-Chlorophenol               | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 91-57-6    | 2-Methylnaphthalene          | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 95-48-7    | 2-Methylphenol               | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 88-74-4    | 2-Nitroaniline               | 1900   | 1900            | ug/kg            | U          | U           | SW846 8270 |

| Location | Sample ID | COE Sample ID                | Date Collected | Depth   | CAS Number | Parameter                  | Result | Detection Limit | Units of Measure | Lab * Qual | Data** Qual | Method     |
|----------|-----------|------------------------------|----------------|---------|------------|----------------------------|--------|-----------------|------------------|------------|-------------|------------|
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 88-75-5    | 2-Nitrophenol              | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 91-94-1    | 3,3'-Dichlorobenzidine     | 780    | 780             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 99-09-2    | 3-Nitroaniline             | 1900   | 1900            | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 534-52-1   | 4,6-Dinitro-o-Cresol       | 1900   | 1900            | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 101-55-3   | 4-Bromophenyl-phenyl Ether | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 106-47-8   | 4-Chloroaniline            | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 7005-72-3  | 4-Chlorophenyl-phenylether | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 106-44-5   | 4-Methylphenol             | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 100-01-6   | 4-Nitroaniline             | 1900   | 1900            | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 100-02-7   | 4-Nitrophenol              | 1900   | 1900            | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 59-50-7    | 4-chloro-3-methylphenol    | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 83-32-9    | Acenaphthene               | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 208-96-8   | Acenaphthylene             | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 120-12-7   | Anthracene                 | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 56-55-3    | Benzo(a)anthracene         | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 50-32-8    | Benzo(a)pyrene             | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 205-99-2   | Benzo(b)fluoranthene       | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 191-24-2   | Benzo(g,h,i)perylene       | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 207-08-9   | Benzo(k)fluoranthene       | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 65-85-0    | Benzoic Acid               | 1900   | 1900            | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 100-51-6   | Benzyl Alcohol             | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 111-91-1   | Bis(2-chloroethoxy)methane | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 111-44-4   | Bis(2-chloroethyl)ether    | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |

| Location | Sample ID | COE Sample ID                | Date Collected | Depth   | CAS Number | Parameter                  | Result | Detection Limit | Units of Measure | Lab * Qual | Data** Qual | Method     |
|----------|-----------|------------------------------|----------------|---------|------------|----------------------------|--------|-----------------|------------------|------------|-------------|------------|
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 117-81-7   | Bis(2-ethylhexyl)phthalate | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 85-68-7    | Butyl Benzyl Phthalate     | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 218-01-9   | Chrysene                   | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 84-74-2    | Di-n-butyl Phthalate       | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 117-84-0   | Di-n-octyl Phthalate       | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 53-70-3    | Dibenz(a,h)anthracene      | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 132-64-9   | Dibenzofuran               | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 84-66-2    | Diethyl Phthalate          | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 131-11-3   | Dimethyl Phthalate         | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 206-44-0   | Fluoranthene               | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 86-73-7    | Fluorene                   | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 118-74-1   | Hexachlorobenzene          | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 87-68-3    | Hexachlorobutadiene        | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 77-47-4    | Hexachlorocyclopentadiene  | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 67-72-1    | Hexachloroethane           | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 193-39-5   | Indeno(1,2,3-cd)pyrene     | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 78-59-1    | Isophorone                 | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 621-64-7   | N-Nitroso-di-n-propylamine | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 86-30-6    | N-Nitrosodiphenylamine     | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 91-20-3    | Naphthalene                | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 98-95-3    | Nitrobenzene               | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 87-86-5    | Pentachlorophenol          | 1900   | 1900            | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 85-01-8    | Phenanthrene               | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |

| Location | Sample ID | COE Sample ID                | Date Collected | Depth   | CAS Number | Parameter                   | Result | Detection Limit | Units of Measure | Lab * Qual | Data** Qual | Method     |
|----------|-----------|------------------------------|----------------|---------|------------|-----------------------------|--------|-----------------|------------------|------------|-------------|------------|
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 108-95-2   | Phenol                      | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 129-00-0   | Pyrene                      | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 110-86-1   | Pyridine                    | 390    | 390             | ug/kg            | U          | U           | SW846 8270 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 630-20-6   | 1,1,1,2-Tetrachloroethane   | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 71-55-6    | 1,1,1-Trichloroethane       | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 79-34-5    | 1,1,2,2-Tetrachloroethane   | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 79-00-5    | 1,1,2-Trichloroethane       | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 75-34-3    | 1,1-Dichloroethane          | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 75-35-4    | 1,1-Dichloroethene          | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 563-58-6   | 1,1-Dichloropropene         | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 87-61-6    | 1,2,3-Trichlorobenzene      | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 96-18-4    | 1,2,3-Trichloropropane      | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 120-82-1   | 1,2,4-Trichlorobenzene      | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 95-63-6    | 1,2,4-trimethylbenzene      | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 106-93-4   | 1,2-Dibromoethane           | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 95-50-1    | 1,2-Dichlorobenzene         | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 107-06-2   | 1,2-Dichloroethane          | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 78-87-5    | 1,2-Dichloropropane         | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 156-59-2   | 1,2-cis-Dichloroethene      | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 96-12-8    | 1,2-dibromo-3-chloropropane | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 156-60-5   | 1,2-trans-Dichloroethene    | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 108-67-8   | 1,3,5-trimethylbenzene      | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 541-73-1   | 1,3-Dichlorobenzene         | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |

| Location | Sample ID | COE Sample ID                | Date Collected | Depth   | CAS Number | Parameter               | Result | Detection Limit | Units of Measure | Lab * Qual | Data** Qual | Method     |
|----------|-----------|------------------------------|----------------|---------|------------|-------------------------|--------|-----------------|------------------|------------|-------------|------------|
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 142-28-9   | 1,3-Dichloropropane     | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 106-46-7   | 1,4-Dichlorobenzene     | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 594-20-7   | 2,2-Dichloropropane     | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 78-93-3    | 2-Butanone              | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 95-49-8    | 2-Chlorotoluene         | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 591-78-6   | 2-Hexanone              | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 106-43-4   | 4-Chlorotoluene         | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 108-10-1   | 4-Methyl-2-pentanone    | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 67-64-1    | Acetone                 | 8      | 6               | ug/kg            |            |             | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 71-43-2    | Benzene                 | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 108-86-1   | Bromobenzene            | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 74-97-5    | Bromochloromethane      | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 75-27-4    | Bromodichloromethane    | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 75-25-2    | Bromoform               | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 74-83-9    | Bromomethane            | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 56-23-5    | Carbon Tetrachloride    | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 108-90-7   | Chlorobenzene           | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 75-00-3    | Chloroethane            | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 67-66-3    | Chloroform              | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 74-87-3    | Chloromethane           | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 124-48-1   | Dibromochloromethane    | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 74-95-3    | Dibromomethane          | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 75-71-8    | Dichlorodifluoromethane | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |

| Location | Sample ID | COE Sample ID                | Date Collected | Depth   | CAS Number | Parameter              | Result | Detection Limit | Units of Measure | Lab * Qual | Data** Qual | Method     |
|----------|-----------|------------------------------|----------------|---------|------------|------------------------|--------|-----------------|------------------|------------|-------------|------------|
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 100-41-4   | Ethylbenzene           | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 87-68-3    | Hexachlorobutadiene    | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 98-82-8    | Isopropyl Benzene      | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 75-09-2    | Methylene Chloride     | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 91-20-3    | Naphthalene            | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 100-42-5   | Styrene                | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 127-18-4   | Tetrachloroethene      | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 108-88-3   | Toluene                | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 79-01-6    | Trichloroethene        | 16     | 6               | ug/kg            |            |             | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 75-69-4    | Trichlorofluoromethane | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 75-01-4    | Vinyl Chloride         | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 13-302-07  | m,p-Xylene             | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 104-51-8   | n-Butylbenzene         | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 103-65-1   | n-propylbenzene        | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 95-47-6    | o-Xylene               | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 99-87-6    | p-Isopropyltoluene     | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 135-98-8   | sec-Butylbenzene       | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR101W   | 21TR104   | FH021-TR104/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 98-06-6    | tert-Butylbenzene      | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 7440-38-2  | Arsenic                | 5.5    | 0.39            | mg/kg            |            |             | SW846 6010 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 7440-39-3  | Barium                 | 58.3   | 0.08            | mg/kg            |            |             | SW846 6010 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 7440-43-9  | Cadmium                | 0.29   | 0.06            | mg/kg            | B          |             | SW846 6010 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 7440-47-3  | Chromium               | 10.5   | 0.09            | mg/kg            |            |             | SW846 6010 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 7439-92-1  | Lead                   | 11.9   | 0.23            | mg/kg            |            |             | SW846 6010 |

| Location | Sample ID | COE Sample ID                | Date Collected | Depth   | CAS Number | Parameter                    | Result | Detection Limit | Units of Measure | Lab * Qual | Data** Qual | Method     |
|----------|-----------|------------------------------|----------------|---------|------------|------------------------------|--------|-----------------|------------------|------------|-------------|------------|
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 7439-97-6  | Mercury                      | 0.04   | 0.04            | mg/kg            | U          | U           | SW846 7470 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 7782-49-2  | Selenium                     | 1.4    | 1.4             | mg/kg            | UW         | UJ          | SW846 7740 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 7440-22-4  | Silver                       | 0.22   | 0.22            | mg/kg            | U          | U           | SW846 6010 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 95-94-3    | 1,2,4,5-Tetrachlorobenzene   | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 120-82-1   | 1,2,4-Trichlorobenzene       | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 95-50-1    | 1,2-Dichlorobenzene          | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 541-73-1   | 1,3-Dichlorobenzene          | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 106-46-7   | 1,4-Dichlorobenzene          | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 108-60-1   | 2,2'-oxybis(1-chloropropane) | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 95-95-4    | 2,4,5-Trichlorophenol        | 2000   | 2000            | ug/kg            | U          | U           | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 88-06-2    | 2,4,6-Trichlorophenol        | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 120-83-2   | 2,4-Dichlorophenol           | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 105-67-9   | 2,4-Dimethylphenol           | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 51-28-5    | 2,4-Dinitrophenol            | 2000   | 2000            | ug/kg            | U          | U           | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 121-14-2   | 2,4-Dinitrotoluene           | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 606-20-2   | 2,6-Dinitrotoluene           | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 91-58-7    | 2-Chloronaphthalene          | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 95-57-8    | 2-Chlorophenol               | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 91-57-6    | 2-Methylnaphthalene          | 97     | 420             | ug/kg            | J          | J           | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 95-48-7    | 2-Methylphenol               | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 88-74-4    | 2-Nitroaniline               | 2000   | 2000            | ug/kg            | U          | U           | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 88-75-5    | 2-Nitrophenol                | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 91-94-1    | 3,3'-Dichlorobenzidine       | 840    | 840             | ug/kg            | U          | U           | SW846 8270 |

| Location | Sample ID | COE Sample ID                | Date Collected | Depth   | CAS Number | Parameter                  | Result | Detection Limit | Units of Measure | Lab * Qual | Data ** Qual | Method     |
|----------|-----------|------------------------------|----------------|---------|------------|----------------------------|--------|-----------------|------------------|------------|--------------|------------|
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 99-09-2    | 3-Nitroaniline             | 2000   | 2000            | ug/kg            | U          | U            | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 534-52-1   | 4,6-Dinitro-o-Cresol       | 2000   | 2000            | ug/kg            | U          | U            | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 101-55-3   | 4-Bromophenyl-phenyl Ether | 420    | 420             | ug/kg            | U          | U            | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 106-47-8   | 4-Chloroaniline            | 420    | 420             | ug/kg            | U          | U            | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 7005-72-3  | 4-Chlorophenyl-phenylether | 420    | 420             | ug/kg            | U          | U            | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 106-44-5   | 4-Methylphenol             | 420    | 420             | ug/kg            | U          | U            | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 100-01-6   | 4-Nitroaniline             | 2000   | 2000            | ug/kg            | U          | U            | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 100-02-7   | 4-Nitrophenol              | 2000   | 2000            | ug/kg            | U          | U            | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 59-50-7    | 4-chloro-3-methylphenol    | 420    | 420             | ug/kg            | U          | U            | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 83-32-9    | Acenaphthene               | 420    | 420             | ug/kg            | U          | U            | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 208-96-8   | Acenaphthylene             | 420    | 420             | ug/kg            | U          | U            | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 120-12-7   | Anthracene                 | 420    | 420             | ug/kg            | U          | U            | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 56-55-3    | Benzo(a)anthracene         | 420    | 420             | ug/kg            | U          | U            | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 50-32-8    | Benzo(a)pyrene             | 43     | 420             | ug/kg            | J          | J            | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 205-99-2   | Benzo(b)fluoranthene       | 53     | 420             | ug/kg            | J          | J            | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 191-24-2   | Benzo(g,h,i)perylene       | 420    | 420             | ug/kg            | U          | U            | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 207-08-9   | Benzo(k)fluoranthene       | 49     | 420             | ug/kg            | J          | J            | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 65-85-0    | Benzoic Acid               | 2000   | 2000            | ug/kg            | U          | U            | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 100-51-6   | Benzyl Alcohol             | 420    | 420             | ug/kg            | U          | U            | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 111-91-1   | Bis(2-chloroethoxy)methane | 420    | 420             | ug/kg            | U          | U            | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 111-44-4   | Bis(2-chloroethyl)ether    | 420    | 420             | ug/kg            | U          | U            | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 117-81-7   | Bis(2-ethylhexyl)phthalate | 420    | 420             | ug/kg            | U          | U            | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 85-68-7    | Butyl Benzyl Phthalate     | 420    | 420             | ug/kg            | U          | U            | SW846 8270 |

| Location | Sample ID | COE Sample ID                | Date Collected | Depth   | CAS Number | Parameter                  | Result | Detection Limit | Units of Measure | Lab * Qual | Data** Qual | Method     |
|----------|-----------|------------------------------|----------------|---------|------------|----------------------------|--------|-----------------|------------------|------------|-------------|------------|
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 218-01-9   | Chrysene                   | 58     | 420             | ug/kg            | J          | J           | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 84-74-2    | Di-n-butyl Phthalate       | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 117-84-0   | Di-n-octyl Phthalate       | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 53-70-3    | Dibenz(a,h)anthracene      | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 132-64-9   | Dibenzofuran               | 50     | 420             | ug/kg            | J          | J           | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 84-66-2    | Diethyl Phthalate          | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 131-11-3   | Dimethyl Phthalate         | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 206-44-0   | Fluoranthene               | 72     | 420             | ug/kg            | J          | J           | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 86-73-7    | Fluorene                   | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 118-74-1   | Hexachlorobenzene          | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 87-68-3    | Hexachlorobutadiene        | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 77-47-4    | Hexachlorocyclopentadiene  | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 67-72-1    | Hexachloroethane           | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 193-39-5   | Indeno(1,2,3-cd)pyrene     | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 78-59-1    | Isophorone                 | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 621-64-7   | N-Nitroso-di-n-propylamine | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 86-30-6    | N-Nitrosodiphenylamine     | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 91-20-3    | Naphthalene                | 44     | 420             | ug/kg            | J          | J           | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 98-95-3    | Nitrobenzene               | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 87-86-5    | Pentachlorophenol          | 2000   | 2000            | ug/kg            | U          | U           | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 85-01-8    | Phenanthrene               | 120    | 420             | ug/kg            | J          | J           | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 108-95-2   | Phenol                     | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 129-00-0   | Pyrene                     | 67     | 420             | ug/kg            | J          | J           | SW846 8270 |

| Location | Sample ID | COE Sample ID                | Date Collected | Depth   | CAS Number | Parameter                   | Result | Detection Limit | Units of Measure | Lab * Qual | Data** Qual | Method     |
|----------|-----------|------------------------------|----------------|---------|------------|-----------------------------|--------|-----------------|------------------|------------|-------------|------------|
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 110-86-1   | Pyridine                    | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 630-20-6   | 1,1,1,2-Tetrachloroethane   | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 71-55-6    | 1,1,1-Trichloroethane       | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 79-34-5    | 1,1,2,2-Tetrachloroethane   | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 79-00-5    | 1,1,2-Trichloroethane       | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 75-34-3    | 1,1-Dichloroethane          | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 75-35-4    | 1,1-Dichloroethene          | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 563-58-6   | 1,1-Dichloropropene         | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 87-61-6    | 1,2,3-Trichlorobenzene      | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 96-18-4    | 1,2,3-Trichloropropane      | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 120-82-1   | 1,2,4-Trichlorobenzene      | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 95-63-6    | 1,2,4-trimethylbenzene      | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 106-93-4   | 1,2-Dibromoethane           | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 95-50-1    | 1,2-Dichlorobenzene         | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 107-06-2   | 1,2-Dichloroethane          | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 78-87-5    | 1,2-Dichloropropane         | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 156-59-2   | 1,2-cis-Dichloroethene      | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 96-12-8    | 1,2-dibromo-3-chloropropane | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 156-60-5   | 1,2-trans-Dichloroethene    | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 108-67-8   | 1,3,5-trimethylbenzene      | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 541-73-1   | 1,3-Dichlorobenzene         | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 142-28-9   | 1,3-Dichloropropane         | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 106-46-7   | 1,4-Dichlorobenzene         | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |

| Location | Sample ID | COE Sample ID                | Date Collected | Depth   | CAS Number | Parameter               | Result | Detection Limit | Units of Measure | Lab * Qual | Data** Qual | Method     |
|----------|-----------|------------------------------|----------------|---------|------------|-------------------------|--------|-----------------|------------------|------------|-------------|------------|
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 594-20-7   | 2,2-Dichloropropane     | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 78-93-3    | 2-Butanone              | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 95-49-8    | 2-Chlorotoluene         | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 591-78-6   | 2-Hexanone              | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 106-43-4   | 4-Chlorotoluene         | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 108-10-1   | 4-Methyl-2-pentanone    | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 67-64-1    | Acetone                 | 7      | 6               | ug/kg            |            |             | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 71-43-2    | Benzene                 | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 108-86-1   | Bromobenzene            | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 74-97-5    | Bromochloromethane      | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 75-27-4    | Bromodichloromethane    | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 75-25-2    | Bromoform               | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 74-83-9    | Bromomethane            | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 56-23-5    | Carbon Tetrachloride    | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 108-90-7   | Chlorobenzene           | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 75-00-3    | Chloroethane            | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 67-66-3    | Chloroform              | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 74-87-3    | Chloromethane           | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 124-48-1   | Dibromochloromethane    | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 74-95-3    | Dibromomethane          | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 75-71-8    | Dichlorodifluoromethane | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 100-41-4   | Ethylbenzene            | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 87-68-3    | Hexachlorobutadiene     | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |

| Location | Sample ID | COE Sample ID                | Date Collected | Depth   | CAS Number | Parameter              | Result | Detection Limit | Units of Measure | Lab * Qual | Data** Qual | Method     |
|----------|-----------|------------------------------|----------------|---------|------------|------------------------|--------|-----------------|------------------|------------|-------------|------------|
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 98-82-8    | Isopropyl Benzene      | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 75-09-2    | Methylene Chloride     | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 91-20-3    | Naphthalene            | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 100-42-5   | Styrene                | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 127-18-4   | Tetrachloroethene      | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 108-88-3   | Toluene                | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 79-01-6    | Trichloroethene        | 8      | 6               | ug/kg            |            |             | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 75-69-4    | Trichlorofluoromethane | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 75-01-4    | Vinyl Chloride         | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 13-302-07  | m,p-Xylene             | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 104-51-8   | n-Butylbenzene         | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 103-65-1   | n-propylbenzene        | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 95-47-6    | o-Xylene               | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 99-87-6    | p-Isopropyltoluene     | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 135-98-8   | sec-Butylbenzene       | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102E   | 21TR103   | FH021-TR103/03-20-97/0.0-8.0 | 03/20/1997     | 2.0-8.0 | 98-06-6    | tert-Butylbenzene      | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 7440-38-2  | Arsenic                | 2.9    | 0.39            | mg/kg            |            |             | SW846 6010 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 7440-39-3  | Barium                 | 64.2   | 0.08            | mg/kg            |            |             | SW846 6010 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 7440-43-9  | Cadmium                | 0.11   | 0.06            | mg/kg            | B          |             | SW846 6010 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 7440-47-3  | Chromium               | 12.3   | 0.09            | mg/kg            |            |             | SW846 6010 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 7439-92-1  | Lead                   | 10.6   | 0.23            | mg/kg            |            |             | SW846 6010 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 7439-97-6  | Mercury                | 0.04   | 0.04            | mg/kg            | U          | U           | SW846 6010 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 7782-49-2  | Selenium               | 0.28   | 0.28            | mg/kg            | UWN        | UJ          | SW846 6010 |

| Location | Sample ID | COE Sample ID                | Date Collected | Depth   | CAS Number | Parameter                    | Result | Detection Limit | Units of Measure | Lab * Qual | Data** Qual | Method     |
|----------|-----------|------------------------------|----------------|---------|------------|------------------------------|--------|-----------------|------------------|------------|-------------|------------|
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 7440-22-4  | Silver                       | 0.22   | 0.22            | mg/kg            | U          | U           | SW846 6010 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 95-94-3    | 1,2,4,5-Tetrachlorobenzene   | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 120-82-1   | 1,2,4-Trichlorobenzene       | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 95-50-1    | 1,2-Dichlorobenzene          | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 541-73-1   | 1,3-Dichlorobenzene          | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 106-46-7   | 1,4-Dichlorobenzene          | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 108-60-1   | 2,2'-oxybis(1-chloropropane) | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 95-95-4    | 2,4,5-Trichlorophenol        | 2000   | 2000            | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 88-06-2    | 2,4,6-Trichlorophenol        | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 120-83-2   | 2,4-Dichlorophenol           | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 105-67-9   | 2,4-Dimethylphenol           | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 51-28-5    | 2,4-Dinitrophenol            | 2000   | 2000            | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 121-14-2   | 2,4-Dinitrotoluene           | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 606-20-2   | 2,6-Dinitrotoluene           | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 91-58-7    | 2-Chloronaphthalene          | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 95-57-8    | 2-Chlorophenol               | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 91-57-6    | 2-Methylnaphthalene          | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 95-48-7    | 2-Methylphenol               | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 88-74-4    | 2-Nitroaniline               | 2000   | 2000            | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 88-75-5    | 2-Nitrophenol                | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 91-94-1    | 3,3'-Dichlorobenzidine       | 840    | 840             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 99-09-2    | 3-Nitroaniline               | 2000   | 2000            | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 534-52-1   | 4,6-Dinitro-o-Cresol         | 2000   | 2000            | ug/kg            | U          | U           | SW846 8270 |

| Location | Sample ID | COE Sample ID                | Date Collected | Depth   | CAS Number | Parameter                  | Result | Detection Limit | Units of Measure | Lab * Qual | Data** Qual | Method     |
|----------|-----------|------------------------------|----------------|---------|------------|----------------------------|--------|-----------------|------------------|------------|-------------|------------|
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 101-55-3   | 4-Bromophenyl-phenyl Ether | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 106-47-8   | 4-Chloroaniline            | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 7005-72-3  | 4-Chlorophenyl-phenylether | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 106-44-5   | 4-Methylphenol             | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 100-01-6   | 4-Nitroaniline             | 2000   | 2000            | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 100-02-7   | 4-Nitrophenol              | 2000   | 2000            | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 59-50-7    | 4-chloro-3-methylphenol    | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 83-32-9    | Acenaphthene               | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 208-96-8   | Acenaphthylene             | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 120-12-7   | Anthracene                 | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 56-55-3    | Benzo(a)anthracene         | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 50-32-8    | Benzo(a)pyrene             | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 205-99-2   | Benzo(b)fluoranthene       | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 191-24-2   | Benzo(g,h,i)perylene       | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 207-08-9   | Benzo(k)fluoranthene       | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 65-85-0    | Benzoic Acid               | 2000   | 2000            | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 100-51-6   | Benzyl Alcohol             | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 111-91-1   | Bis(2-chloroethoxy)methane | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 111-44-4   | Bis(2-chloroethyl)ether    | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 117-81-7   | Bis(2-ethylhexyl)phthalate | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 85-68-7    | Butyl Benzyl Phthalate     | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 218-01-9   | Chrysene                   | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 84-74-2    | Di-n-butyl Phthalate       | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |

| Location | Sample ID | COE Sample ID                | Date Collected | Depth   | CAS Number | Parameter                  | Result | Detection Limit | Units of Measure | Lab * Qual | Data** Qual | Method     |
|----------|-----------|------------------------------|----------------|---------|------------|----------------------------|--------|-----------------|------------------|------------|-------------|------------|
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 117-84-0   | Di-n-octyl Phthalate       | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 53-70-3    | Dibenz(a,h)anthracene      | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 132-64-9   | Dibenzofuran               | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 84-66-2    | Diethyl Phthalate          | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 131-11-3   | Dimethyl Phthalate         | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 206-44-0   | Fluoranthene               | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 86-73-7    | Fluorene                   | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 118-74-1   | Hexachlorobenzene          | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 87-68-3    | Hexachlorobutadiene        | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 77-47-4    | Hexachlorocyclopentadiene  | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 67-72-1    | Hexachloroethane           | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 193-39-5   | Indeno(1,2,3-cd)pyrene     | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 78-59-1    | Isophorone                 | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 621-64-7   | N-Nitroso-di-n-propylamine | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 86-30-6    | N-Nitrosodiphenylamine     | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 91-20-3    | Naphthalene                | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 98-95-3    | Nitrobenzene               | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 87-86-5    | Pentachlorophenol          | 2000   | 2000            | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 85-01-8    | Phenanthrene               | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 108-95-2   | Phenol                     | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 129-00-0   | Pyrene                     | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 110-86-1   | Pyridine                   | 420    | 420             | ug/kg            | U          | U           | SW846 8270 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 630-20-6   | 1,1,1,2-Tetrachloroethane  | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |

| Location | Sample ID | COE Sample ID                | Date Collected | Depth   | CAS Number | Parameter                   | Result | Detection Limit | Units of Measure | Lab * Qual | Data** Qual | Method     |
|----------|-----------|------------------------------|----------------|---------|------------|-----------------------------|--------|-----------------|------------------|------------|-------------|------------|
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 71-55-6    | 1,1,1-Trichloroethane       | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 79-34-5    | 1,1,2,2-Tetrachloroethane   | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 79-00-5    | 1,1,2-Trichloroethane       | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 75-34-3    | 1,1-Dichloroethane          | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 75-35-4    | 1,1-Dichloroethene          | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 563-58-6   | 1,1-Dichloropropene         | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 87-61-6    | 1,2,3-Trichlorobenzene      | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 96-18-4    | 1,2,3-Trichloropropane      | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 120-82-1   | 1,2,4-Trichlorobenzene      | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 95-63-6    | 1,2,4-trimethylbenzene      | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 106-93-4   | 1,2-Dibromoethane           | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 95-50-1    | 1,2-Dichlorobenzene         | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 107-06-2   | 1,2-Dichloroethane          | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 78-87-5    | 1,2-Dichloropropane         | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 156-59-2   | 1,2-cis-Dichloroethene      | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 96-12-8    | 1,2-dibromo-3-chloropropane | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 156-60-5   | 1,2-trans-Dichloroethene    | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 108-67-8   | 1,3,5-trimethylbenzene      | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 541-73-1   | 1,3-Dichlorobenzene         | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 142-28-9   | 1,3-Dichloropropane         | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 106-46-7   | 1,4-Dichlorobenzene         | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 594-20-7   | 2,2-Dichloropropane         | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 78-93-3    | 2-Butanone                  | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |

| Location | Sample ID | COE Sample ID                | Date Collected | Depth   | CAS Number | Parameter               | Result | Detection Limit | Units of Measure | Lab * Qual | Data** Qual | Method     |
|----------|-----------|------------------------------|----------------|---------|------------|-------------------------|--------|-----------------|------------------|------------|-------------|------------|
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 95-49-8    | 2-Chlorotoluene         | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 591-78-6   | 2-Hexanone              | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 106-43-4   | 4-Chlorotoluene         | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 108-10-1   | 4-Methyl-2-pentanone    | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 67-64-1    | Acetone                 | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 71-43-2    | Benzene                 | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 108-86-1   | Bromobenzene            | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 74-97-5    | Bromochloromethane      | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 75-27-4    | Bromodichloromethane    | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 75-25-2    | Bromoform               | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 74-83-9    | Bromomethane            | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 56-23-5    | Carbon Tetrachloride    | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 108-90-7   | Chlorobenzene           | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 75-00-3    | Chloroethane            | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 67-66-3    | Chloroform              | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 74-87-3    | Chloromethane           | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 124-48-1   | Dibromochloromethane    | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 74-95-3    | Dibromomethane          | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 75-71-8    | Dichlorodifluoromethane | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 100-41-4   | Ethylbenzene            | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 87-68-3    | Hexachlorobutadiene     | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 98-82-8    | Isopropyl Benzene       | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 75-09-2    | Methylene Chloride      | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |

| Location | Sample ID | COE Sample ID                | Date Collected | Depth   | CAS Number | Parameter                  | Result | Detection Limit | Units of Measure | Lab * Qual | Data** Qual | Method     |
|----------|-----------|------------------------------|----------------|---------|------------|----------------------------|--------|-----------------|------------------|------------|-------------|------------|
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 91-20-3    | Naphthalene                | 10     | 6               | ug/kg            |            |             | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 100-42-5   | Styrene                    | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 127-18-4   | Tetrachloroethene          | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 108-88-3   | Toluene                    | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 79-01-6    | Trichloroethene            | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 75-69-4    | Trichlorofluoromethane     | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 75-01-4    | Vinyl Chloride             | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 13-302-07  | m,p-Xylene                 | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 104-51-8   | n-Butylbenzene             | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 103-65-1   | n-propylbenzene            | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 95-47-6    | o-Xylene                   | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 99-87-6    | p-Isopropyltoluene         | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 135-98-8   | sec-Butylbenzene           | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | 21TR102   | FH021-TR102/03-19-97/0.0-7.0 | 03/19/1997     | 2.0-8.0 | 98-06-6    | tert-Butylbenzene          | 6      | 6               | ug/kg            | U          | U           | SW846 8260 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97         | 03/20/1997     | 00-0.0  | 7440-38-2  | Arsenic                    | 3.8    | 2.1             | ug/l             | B          |             | SW846 6010 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97         | 03/20/1997     | 0.0-0.0 | 7440-39-3  | Barium                     | 232    | 0.30            | ug/l             |            |             | SW846 6010 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97         | 03/20/1997     | 0.0-0.0 | 7440-43-9  | Cadmium                    | 0.3    | 0.30            | ug/l             | U          | U           | SW846 6010 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97         | 03/20/1997     | 0.0-0.0 | 7440-47-3  | Chromium                   | 1      | 1.0             | ug/l             | U          | U           | SW846 6010 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97         | 03/20/1997     | 0.0-0.0 | 7439-92-1  | Lead                       | 3.5    | 0.90            | ug/l             |            |             | SW846 6010 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97         | 03/20/1997     | 0.0-0.0 | 7439-97-6  | Mercury                    | 0.1    | 0.10            | ug/l             | U          | U           | SW846 7470 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97         | 03/20/1997     | 0.0-0.0 | 7782-49-2  | Selenium                   | 2.2    | 2.2             | ug/l             | UW         | UJ          | SW846 7740 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97         | 03/20/1997     | 0.0-0.0 | 7440-22-4  | Silver                     | 1      | 1.0             | ug/l             | U          | U           | SW846 6010 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97         | 03/20/1997     | 0.0-0.0 | 95-94-3    | 1,2,4,5-Tetrachlorobenzene | 10     | 10              | ug/l             | U          | U           | SW846 8270 |

| Location | Sample ID | COE Sample ID        | Date Collected | Depth   | CAS Number | Parameter                    | Result | Detection Limit | Units of Measure | Lab * Qual | Data** Qual | Method     |
|----------|-----------|----------------------|----------------|---------|------------|------------------------------|--------|-----------------|------------------|------------|-------------|------------|
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 120-82-1   | 1,2,4-Trichlorobenzene       | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 95-50-1    | 1,2-Dichlorobenzene          | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 541-73-1   | 1,3-Dichlorobenzene          | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 106-46-7   | 1,4-Dichlorobenzene          | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 108-60-1   | 2,2'-oxybis(1-chloropropane) | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 95-95-4    | 2,4,5-Trichlorophenol        | 50     | 50              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 88-06-2    | 2,4,6-Trichlorophenol        | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 120-83-2   | 2,4-Dichlorophenol           | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 105-67-9   | 2,4-Dimethylphenol           | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 51-28-5    | 2,4-Dinitrophenol            | 50     | 50              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 121-14-2   | 2,4-Dinitrotoluene           | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 606-20-2   | 2,6-Dinitrotoluene           | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 91-58-7    | 2-Chloronaphthalene          | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 95-57-8    | 2-Chlorophenol               | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 91-57-6    | 2-Methylnaphthalene          | 1      | 10              | ug/l             | J          | J           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 95-48-7    | 2-Methylphenol               | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 88-74-4    | 2-Nitroaniline               | 50     | 50              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 88-75-5    | 2-Nitrophenol                | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 91-94-1    | 3,3'-Dichlorobenzidine       | 20     | 20              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 99-09-2    | 3-Nitroaniline               | 50     | 50              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 534-52-1   | 4,6-Dinitro-o-Cresol         | 50     | 50              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 101-55-3   | 4-Bromophenyl-phenyl Ether   | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 106-47-8   | 4-Chloroaniline              | 10     | 10              | ug/l             | U          | U           | SW846 8270 |

| Location | Sample ID | COE Sample ID        | Date Collected | Depth   | CAS Number | Parameter                  | Result | Detection Limit | Units of Measure | Lab * Qual | Data** Qual | Method     |
|----------|-----------|----------------------|----------------|---------|------------|----------------------------|--------|-----------------|------------------|------------|-------------|------------|
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 7005-72-3  | 4-Chlorophenyl-phenylether | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 106-44-5   | 4-Methylphenol             | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 100-01-6   | 4-Nitroaniline             | 50     | 50              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 100-02-7   | 4-Nitrophenol              | 50     | 50              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 59-50-7    | 4-chloro-3-methylphenol    | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 83-32-9    | Acenaphthene               | 2      | 10              | ug/l             | J          | J           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 208-96-8   | Acenaphthylene             | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 120-12-7   | Anthracene                 | 7      | 10              | ug/l             | J          | J           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 56-55-3    | Benzo(a)anthracene         | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 50-32-8    | Benzo(a)pyrene             | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 205-99-2   | Benzo(b)fluoranthene       | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 191-24-2   | Benzo(g,h,i)perylene       | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 207-08-9   | Benzo(k)fluoranthene       | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 65-85-0    | Benzoic Acid               | 2      | 50              | ug/l             | J          | J           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 100-51-6   | Benzyl Alcohol             | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 111-91-1   | Bis(2-chloroethoxy)methane | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 111-44-4   | Bis(2-chloroethyl)ether    | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 117-81-7   | Bis(2-ethylhexyl)phthalate | 3      | 10              | ug/l             | J          | J           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 85-68-7    | Butyl Benzyl Phthalate     | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 218-01-9   | Chrysene                   | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 84-74-2    | Di-n-butyl Phthalate       | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 117-84-0   | Di-n-octyl Phthalate       | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 53-70-3    | Dibenz(a,h)anthracene      | 10     | 10              | ug/l             | U          | U           | SW846 8270 |

| Location | Sample ID | COE Sample ID        | Date Collected | Depth   | CAS Number | Parameter                  | Result | Detection Limit | Units of Measure | Lab * Qual | Data** Qual | Method     |
|----------|-----------|----------------------|----------------|---------|------------|----------------------------|--------|-----------------|------------------|------------|-------------|------------|
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 132-64-9   | Dibenzofuran               | 1      | 10              | ug/l             | J          | J           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 84-66-2    | Diethyl Phthalate          | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 131-11-3   | Dimethyl Phthalate         | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 206-44-0   | Fluoranthene               | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 86-73-7    | Fluorene                   | 1      | 10              | ug/l             | J          | J           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 118-74-1   | Hexachlorobenzene          | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 87-68-3    | Hexachlorobutadiene        | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 77-47-4    | Hexachlorocyclopentadiene  | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 67-72-1    | Hexachloroethane           | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 193-39-5   | Indeno(1,2,3-cd)pyrene     | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 78-59-1    | Isophorone                 | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 621-64-7   | N-Nitroso-di-n-propylamine | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 86-30-6    | N-Nitrosodiphenylamine     | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 91-20-3    | Naphthalene                | 8      | 10              | ug/l             | J          | J           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 98-95-3    | Nitrobenzene               | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 87-86-5    | Pentachlorophenol          | 50     | 50              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 85-01-8    | Phenanthrene               | 1      | 10              | ug/l             | J          | J           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 108-95-2   | Phenol                     | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 129-00-0   | Pyrene                     | 10     | 10              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 110-86-1   | Pyridine                   | 50     | 50              | ug/l             | U          | U           | SW846 8270 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 630-20-6   | 1,1,1,2-Tetrachloroethane  | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 71-55-6    | 1,1,1-Trichloroethane      | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 79-34-5    | 1,1,2,2-Tetrachloroethane  | 5      | 5               | ug/l             | U          | U           | SW846 8260 |

| Location | Sample ID | COE Sample ID        | Date Collected | Depth   | CAS Number | Parameter                   | Result | Detection Limit | Units of Measure | Lab * Qual | Data** Qual | Method     |
|----------|-----------|----------------------|----------------|---------|------------|-----------------------------|--------|-----------------|------------------|------------|-------------|------------|
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 79-00-5    | 1,1,2-Trichloroethane       | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 75-34-3    | 1,1-Dichloroethane          | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 75-35-4    | 1,1-Dichloroethene          | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 563-58-6   | 1,1-Dichloropropene         | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 87-61-6    | 1,2,3-Trichlorobenzene      | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 96-18-4    | 1,2,3-Trichloropropane      | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 120-82-1   | 1,2,4-Trichlorobenzene      | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 95-63-6    | 1,2,4-trimethylbenzene      | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 106-93-4   | 1,2-Dibromoethane           | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 95-50-1    | 1,2-Dichlorobenzene         | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 107-06-2   | 1,2-Dichloroethane          | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 78-87-5    | 1,2-Dichloropropane         | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 156-59-2   | 1,2-cis-Dichloroethene      | 1      | 5               | ug/l             | J          | J           | SW846 8260 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 96-12-8    | 1,2-dibromo-3-chloropropane | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 156-60-5   | 1,2-trans-Dichloroethene    | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 108-67-8   | 1,3,5-trimethylbenzene      | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 541-73-1   | 1,3-Dichlorobenzene         | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 142-28-9   | 1,3-Dichloropropane         | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 106-46-7   | 1,4-Dichlorobenzene         | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 594-20-7   | 2,2-Dichloropropane         | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 78-93-3    | 2-Butanone                  | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 95-49-8    | 2-Chlorotoluene             | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 591-78-6   | 2-Hexanone                  | 5      | 5               | ug/l             | U          | U           | SW846 8260 |

| Location | Sample ID | COE Sample ID        | Date Collected | Depth   | CAS Number | Parameter               | Result | Detection Limit | Units of Measure | Lab * Qual | Data** Qual | Method     |
|----------|-----------|----------------------|----------------|---------|------------|-------------------------|--------|-----------------|------------------|------------|-------------|------------|
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 106-43-4   | 4-Chlorotoluene         | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 108-10-1   | 4-Methyl-2-pentanone    | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 67-64-1    | Acetone                 | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 71-43-2    | Benzene                 | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 108-86-1   | Bromobenzene            | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 74-97-5    | Bromoform               | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 75-27-4    | Bromodichloromethane    | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 75-25-2    | Bromoform               | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 74-83-9    | Bromomethane            | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 56-23-5    | Carbon Tetrachloride    | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 108-90-7   | Chlorobenzene           | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 75-00-3    | Chloroethane            | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 67-66-3    | Chloroform              | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 74-87-3    | Chloromethane           | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 124-48-1   | Dibromochloromethane    | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 74-95-3    | Dibromomethane          | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 75-71-8    | Dichlorodifluoromethane | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 100-41-4   | Ethylbenzene            | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 87-68-3    | Hexachlorobutadiene     | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 98-82-8    | Isopropyl Benzene       | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 75-09-2    | Methylene Chloride      | 5      | 5               | ug/l             |            |             | SW846 8260 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 91-20-3    | Naphthalene             | 19     | 5               | ug/l             |            |             | SW846 8260 |
| TR102W   | FHGW165   | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 100-42-5   | Styrene                 | 5      | 5               | ug/l             | U          | U           | SW846 8260 |

| Location | Sample ID            | COE Sample ID        | Date Collected | Depth   | CAS Number | Parameter                 | Result | Detection Limit | Units of Measure | Lab * Qual | Data** Qual | Method     |
|----------|----------------------|----------------------|----------------|---------|------------|---------------------------|--------|-----------------|------------------|------------|-------------|------------|
| TR102W   | FHGW165              | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 127-18-4   | Tetrachloroethene         | 2      | 5               | ug/l             | J          | J           | SW846 8260 |
| TR102W   | FHGW165              | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 108-88-3   | Toluene                   | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR102W   | FHGW165              | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 79-01-6    | Trichloroethene           | 4      | 5               | ug/l             | J          | J           | SW846 8260 |
| TR102W   | FHGW165              | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 75-69-4    | Trichlorofluoromethane    | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR102W   | FHGW165              | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 75-01-4    | Vinyl Chloride            | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR102W   | FHGW165              | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 13-302-07  | m,p-Xylene                | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR102W   | FHGW165              | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 104-51-8   | n-Butylbenzene            | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR102W   | FHGW165              | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 103-65-1   | n-propylbenzene           | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR102W   | FHGW165              | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 95-47-6    | o-Xylene                  | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR102W   | FHGW165              | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 99-87-6    | p-Isopropyltoluene        | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR102W   | FHGW165              | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 135-98-8   | sec-Butylbenzene          | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TR102W   | FHGW165              | FH021-GW165/03-20-97 | 03/20/1997     | 0.0-0.0 | 98-06-6    | tert-Butylbenzene         | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TB104    | FH021-TB104/03-20-97 | FH021-TB104/03-20-97 | 03/20/1997     |         | 630-20-6   | 1,1,1,2-Tetrachloroethane | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TB104    | FH021-TB104/03-20-97 | FH021-TB104/03-20-97 | 03/20/1997     |         | 71-55-6    | 1,1,1-Trichloroethane     | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TB104    | FH021-TB104/03-20-97 | FH021-TB104/03-20-97 | 03/20/1997     |         | 79-34-5    | 1,1,2,2-Tetrachloroethane | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TB104    | FH021-TB104/03-20-97 | FH021-TB104/03-20-97 | 03/20/1997     |         | 79-00-5    | 1,1,2-Trichloroethane     | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TB104    | FH021-TB104/03-20-97 | FH021-TB104/03-20-97 | 03/20/1997     |         | 75-34-3    | 1,1-Dichloroethane        | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TB104    | FH021-TB104/03-20-97 | FH021-TB104/03-20-97 | 03/20/1997     |         | 75-35-4    | 1,1-Dichloroethene        | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TB104    | FH021-TB104/03-20-97 | FH021-TB104/03-20-97 | 03/20/1997     |         | 563-58-6   | 1,1-Dichloropropene       | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TB104    | FH021-TB104/03-20-97 | FH021-TB104/03-20-97 | 03/20/1997     |         | 87-61-6    | 1,2,3-Trichlorobenzene    | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TB104    | FH021-TB104/03-20-97 | FH021-TB104/03-20-97 | 03/20/1997     |         | 96-18-4    | 1,2,3-Trichloropropane    | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TB104    | FH021-TB104/03-20-97 | FH021-TB104/03-20-97 | 03/20/1997     |         | 120-82-1   | 1,2,4-Trichlorobenzene    | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
| TB104    | FH021-TB104/03-20-97 | FH021-TB104/03-20-97 | 03/20/1997     |         | 95-63-6    | 1,2,4-trimethylbenzene    | 5      | 5               | ug/l             | U          | U           | SW846 8260 |

| Location | Sample ID | COE Sample ID        | Date Collected | Depth | CAS Number | Parameter                   | Result | Detection Limit | Units of Measure | Lab * Qual | Data** Qual | Method     |
|----------|-----------|----------------------|----------------|-------|------------|-----------------------------|--------|-----------------|------------------|------------|-------------|------------|
|          | TB104     | FH021-TB104/03-20-97 | 03/20/1997     |       | 106-93-4   | 1,2-Dibromoethane           | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
|          | TB104     | FH021-TB104/03-20-97 | 03/20/1997     |       | 95-50-1    | 1,2-Dichlorobenzene         | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
|          | TB104     | FH021-TB104/03-20-97 | 03/20/1997     |       | 107-06-2   | 1,2-Dichloroethane          | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
|          | TB104     | FH021-TB104/03-20-97 | 03/20/1997     |       | 78-87-5    | 1,2-Dichloropropane         | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
|          | TB104     | FH021-TB104/03-20-97 | 03/20/1997     |       | 156-59-2   | 1,2-cis-Dichloroethene      | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
|          | TB104     | FH021-TB104/03-20-97 | 03/20/1997     |       | 96-12-8    | 1,2-dibromo-3-chloropropane | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
|          | TB104     | FH021-TB104/03-20-97 | 03/20/1997     |       | 156-60-5   | 1,2-trans-Dichloroethene    | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
|          | TB104     | FH021-TB104/03-20-97 | 03/20/1997     |       | 108-67-8   | 1,3,5-trimethylbenzene      | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
|          | TB104     | FH021-TB104/03-20-97 | 03/20/1997     |       | 541-73-1   | 1,3-Dichlorobenzene         | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
|          | TB104     | FH021-TB104/03-20-97 | 03/20/1997     |       | 142-28-9   | 1,3-Dichloropropane         | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
|          | TB104     | FH021-TB104/03-20-97 | 03/20/1997     |       | 106-46-7   | 1,4-Dichlorobenzene         | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
|          | TB104     | FH021-TB104/03-20-97 | 03/20/1997     |       | 594-20-7   | 2,2-Dichloropropane         | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
|          | TB104     | FH021-TB104/03-20-97 | 03/20/1997     |       | 78-93-3    | 2-Butanone                  | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
|          | TB104     | FH021-TB104/03-20-97 | 03/20/1997     |       | 95-49-8    | 2-Chlorotoluene             | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
|          | TB104     | FH021-TB104/03-20-97 | 03/20/1997     |       | 591-78-6   | 2-Hexanone                  | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
|          | TB104     | FH021-TB104/03-20-97 | 03/20/1997     |       | 106-43-4   | 4-Chlorotoluene             | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
|          | TB104     | FH021-TB104/03-20-97 | 03/20/1997     |       | 108-10-1   | 4-Methyl-2-pentanone        | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
|          | TB104     | FH021-TB104/03-20-97 | 03/20/1997     |       | 67-64-1    | Acetone                     | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
|          | TB104     | FH021-TB104/03-20-97 | 03/20/1997     |       | 71-43-2    | Benzene                     | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
|          | TB104     | FH021-TB104/03-20-97 | 03/20/1997     |       | 108-86-1   | Bromobenzene                | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
|          | TB104     | FH021-TB104/03-20-97 | 03/20/1997     |       | 74-97-5    | Bromochloromethane          | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
|          | TB104     | FH021-TB104/03-20-97 | 03/20/1997     |       | 75-27-4    | Bromodichloromethane        | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
|          | TB104     | FH021-TB104/03-20-97 | 03/20/1997     |       | 75-25-2    | Bromoform                   | 5      | 5               | ug/l             | U          | U           | SW846 8260 |

| Location | Sample ID | COE Sample ID        | Date Collected | Depth | CAS Number | Parameter               | Result | Detection Limit | Units of Measure | Lab * Qual | Data** Qual | Method     |
|----------|-----------|----------------------|----------------|-------|------------|-------------------------|--------|-----------------|------------------|------------|-------------|------------|
|          | TB104     | FH021-TB104/03-20-97 | 03/20/1997     |       | 74-83-9    | Bromomethane            | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
|          | TB104     | FH021-TB104/03-20-97 | 03/20/1997     |       | 56-23-5    | Carbon Tetrachloride    | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
|          | TB104     | FH021-TB104/03-20-97 | 03/20/1997     |       | 108-90-7   | Chlorobenzene           | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
|          | TB104     | FH021-TB104/03-20-97 | 03/20/1997     |       | 75-00-3    | Chloroethane            | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
|          | TB104     | FH021-TB104/03-20-97 | 03/20/1997     |       | 67-66-3    | Chloroform              | 4      | 5               | ug/l             | J          | J           | SW846 8260 |
|          | TB104     | FH021-TB104/03-20-97 | 03/20/1997     |       | 74-87-3    | Chloromethane           | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
|          | TB104     | FH021-TB104/03-20-97 | 03/20/1997     |       | 124-48-1   | Dibromochloromethane    | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
|          | TB104     | FH021-TB104/03-20-97 | 03/20/1997     |       | 74-95-3    | Dibromomethane          | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
|          | TB104     | FH021-TB104/03-20-97 | 03/20/1997     |       | 75-71-8    | Dichlorodifluoromethane | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
|          | TB104     | FH021-TB104/03-20-97 | 03/20/1997     |       | 100-41-4   | Ethylbenzene            | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
|          | TB104     | FH021-TB104/03-20-97 | 03/20/1997     |       | 87-68-3    | Hexachlorobutadiene     | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
|          | TB104     | FH021-TB104/03-20-97 | 03/20/1997     |       | 98-82-8    | Isopropyl Benzene       | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
|          | TB104     | FH021-TB104/03-20-97 | 03/20/1997     |       | 75-09-2    | Methylene Chloride      | 5      | 5               | ug/l             |            |             | SW846 8260 |
|          | TB104     | FH021-TB104/03-20-97 | 03/20/1997     |       | 91-20-3    | Naphthalene             | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
|          | TB104     | FH021-TB104/03-20-97 | 03/20/1997     |       | 100-42-5   | Styrene                 | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
|          | TB104     | FH021-TB104/03-20-97 | 03/20/1997     |       | 127-18-4   | Tetrachloroethene       | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
|          | TB104     | FH021-TB104/03-20-97 | 03/20/1997     |       | 108-88-3   | Toluene                 | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
|          | TB104     | FH021-TB104/03-20-97 | 03/20/1997     |       | 79-01-6    | Trichloroethene         | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
|          | TB104     | FH021-TB104/03-20-97 | 03/20/1997     |       | 75-69-4    | Trichlorofluoromethane  | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
|          | TB104     | FH021-TB104/03-20-97 | 03/20/1997     |       | 75-01-4    | Vinyl Chloride          | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
|          | TB104     | FH021-TB104/03-20-97 | 03/20/1997     |       | 13-302-07  | m,p-Xylene              | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
|          | TB104     | FH021-TB104/03-20-97 | 03/20/1997     |       | 104-51-8   | n-Butylbenzene          | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
|          | TB104     | FH021-TB104/03-20-97 | 03/20/1997     |       | 103-65-1   | n-propylbenzene         | 5      | 5               | ug/l             | U          | U           | SW846 8260 |

| Location | Sample ID | COE Sample ID        | Date Collected | Depth | CAS Number | Parameter          | Result | Detection Limit | Units of Measure | Lab * Qual | Data** Qual | Method     |
|----------|-----------|----------------------|----------------|-------|------------|--------------------|--------|-----------------|------------------|------------|-------------|------------|
|          | TB104     | FH021-TB104/03-20-97 | 03/20/1997     |       | 95-47-6    | o-Xylene           | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
|          | TB104     | FH021-TB104/03-20-97 | 03/20/1997     |       | 99-87-6    | p-Isopropyltoluene | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
|          | TB104     | FH021-TB104/03-20-97 | 03/20/1997     |       | 135-98-8   | sec-Butylbenzene   | 5      | 5               | ug/l             | U          | U           | SW846 8260 |
|          | TB104     | FH021-TB104/03-20-97 | 03/20/1997     |       | 98-06-6    | tert-Butylbenzene  | 5      | 5               | ug/l             | U          | U           | SW846 8260 |

**APPENDIX C**

**Fort Hood RFI Background Soils Data**

# Ft. Hood RCRA Facility Investigation

## FH-BKG Fort Hood Background

### Analytical Results

Station: SB101 Background Soil Boring SB101

Sample ID: FH000-SB10112-10-96/2.0-2.5 (BKS101)

Matrix: Soil

Sample Depth: 2.0-2.5 FT

Field Sample Type: Grab

Collected: 12/10/96

| Metals   | Result | Detection Limit | Units | Qualifiers |      |
|----------|--------|-----------------|-------|------------|------|
|          |        |                 |       | Lab        | Data |
| Arsenic  | 3      | 0.41            | MG/KG |            |      |
| Barium   | 21.3   | 0.10            | MG/KG | *          | J    |
| Cadmium  | 0.12   | 0.05            | MG/KG | B          |      |
| Chromium | 5.1    | 0.10            | MG/KG | E*         | J    |
| Lead     | 6      | 0.17            | MG/KG | EN*        | J    |
| Mercury  | 0.04   | 0.04            | MG/KG | U          | U    |
| Selenium | 0.37   | 0.37            | MG/KG | U          | U    |
| Silver   | 0.24   | 0.24            | MG/KG | U          | U    |

Sample ID: FH000-SB10212-10-96/4.0-4.7 (BKS102)

Matrix: Soil

Sample Depth: 4.0-4.7 FT

Field Sample Type: Grab

Collected: 12/10/96

| Metals   | Result | Detection Limit | Units | Qualifiers |      |
|----------|--------|-----------------|-------|------------|------|
|          |        |                 |       | Lab        | Data |
| Arsenic  | 2      | 0.39            | MG/KG |            |      |
| Barium   | 8      | 0.10            | MG/KG | *          | J    |
| Cadmium  | 0.05   | 0.05            | MG/KG | B          |      |
| Chromium | 10.3   | 0.10            | MG/KG | E*         | J    |
| Lead     | 5      | 0.17            | MG/KG | EN*        | J    |
| Mercury  | 0.04   | 0.04            | MG/KG | U          | U    |
| Selenium | 0.36   | 0.36            | MG/KG | U          | U    |
| Silver   | 0.23   | 0.23            | MG/KG | U          | U    |

Sample ID: FH000-SB10312-10-96/10.5-11.0 (BKS103)

Matrix: Soil

Sample Depth: 10.5-11.0 FT

Field Sample Type: Grab

Collected: 12/10/96

| Metals   | Result | Detection Limit | Units | Qualifiers |      |
|----------|--------|-----------------|-------|------------|------|
|          |        |                 |       | Lab        | Data |
| Arsenic  | 9.1    | 0.42            | MG/KG |            |      |
| Barium   | 14.7   | 0.10            | MG/KG | *          | J    |
| Cadmium  | 0.05   | 0.05            | MG/KG | U          | U    |
| Chromium | 10.1   | 0.10            | MG/KG | E*         | J    |
| Lead     | 9.5    | 0.18            | MG/KG | EN*        | J    |
| Mercury  | 0.04   | 0.04            | MG/KG | U          | U    |
| Selenium | 0.38   | 0.38            | MG/KG | U          | U    |
| Silver   | 0.24   | 0.24            | MG/KG | U          | U    |

**Ft. Hood RCRA Facility Investigation**  
**FH-BKG Fort Hood Background**  
**Analytical Results**

Station: SB102      Background Soil Boring SB102

Sample ID: FH000-SB12112-12-96/0.0-1.5      (BKSB121)

Matrix: Soil

Sample Depth: 0.0-1.5 FT

Field Sample Type: Grab

Collected: 12/12/96

| Metals   | Result | Detection Limit | Units | Qualifiers |      |
|----------|--------|-----------------|-------|------------|------|
|          |        |                 |       | Lab        | Data |
| Arsenic  | 4.1    | 0.38            | MG/KG |            |      |
| Barium   | 24     | 0.09            | MG/KG |            |      |
| Cadmium  | 0.18   | 0.05            | MG/KG | B          |      |
| Chromium | 6.3    | 0.09            | MG/KG |            |      |
| Lead     | 10.2   | 0.16            | MG/KG | EN         | J    |
| Mercury  | 0.04   | 0.04            | MG/KG | U          | U    |
| Selenium | 0.34   | 0.34            | MG/KG | U          | U    |
| Silver   | 0.22   | 0.22            | MG/KG | U          | U    |

Sample ID: FH000-SB12212-12-96/14.0-14.5      (BKSB122)

Matrix: Soil

Sample Depth: 14.0-14.5 FT

Field Sample Type: Grab

Collected: 12/12/96

| Metals   | Result | Detection Limit | Units | Qualifiers |      |
|----------|--------|-----------------|-------|------------|------|
|          |        |                 |       | Lab        | Data |
| Arsenic  | 3.2    | 0.36            | MG/KG |            |      |
| Barium   | 6.1    | 0.09            | MG/KG |            |      |
| Cadmium  | 0.06   | 0.04            | MG/KG | B          |      |
| Chromium | 4.9    | 0.09            | MG/KG |            |      |
| Lead     | 4.1    | 0.15            | MG/KG | EN         | J    |
| Mercury  | 0.04   | 0.04            | MG/KG | U          | U    |
| Selenium | 0.33   | 0.33            | MG/KG | U          | U    |
| Silver   | 0.21   | 0.21            | MG/KG | U          | U    |

Sample ID: FH000-SB12312-12-96/19.0-19.5      (BKSB123)

Matrix: Soil

Sample Depth: 19.0-19.5 FT

Field Sample Type: Grab

Collected: 12/12/96

| Metals   | Result | Detection Limit | Units | Qualifiers |      |
|----------|--------|-----------------|-------|------------|------|
|          |        |                 |       | Lab        | Data |
| Arsenic  | 3.8    | 0.36            | MG/KG |            |      |
| Barium   | 5.5    | 0.09            | MG/KG |            |      |
| Cadmium  | 0.08   | 0.04            | MG/KG | B          |      |
| Chromium | 4.3    | 0.09            | MG/KG |            |      |
| Lead     | 3.8    | 0.15            | MG/KG | EN         | J    |
| Mercury  | 0.04   | 0.04            | MG/KG | U          | U    |
| Selenium | 0.33   | 0.33            | MG/KG | U          | U    |
| Silver   | 0.21   | 0.21            | MG/KG | U          | U    |

Sample ID: FH000-SB20212-12-96/0.0-1.5      (BKSB202)

Matrix: Soil

Sample Depth: 0.0-1.5 FT

Field Sample Type: Field Duplicate

Collected: 12/12/96

| Metals   | Result | Detection Limit | Units | Qualifiers |      |
|----------|--------|-----------------|-------|------------|------|
|          |        |                 |       | Lab        | Data |
| Arsenic  | 4.2    | 0.37            | MG/KG |            |      |
| Barium   | 18.2   | 0.09            | MG/KG |            |      |
| Cadmium  | 0.12   | 0.04            | MG/KG | B          |      |
| Chromium | 5.9    | 0.09            | MG/KG |            |      |
| Lead     | 4.5    | 0.16            | MG/KG | EN         | J    |
| Mercury  | 0.04   | 0.04            | MG/KG | U          | U    |
| Selenium | 0.34   | 0.34            | MG/KG | U          | U    |
| Silver   | 0.21   | 0.21            | MG/KG | U          | U    |

**Ft. Hood RCRA Facility Investigation**  
**FH-BKG Fort Hood Background**  
**Analytical Results**

Station: SB103 Background Soil Boring SB103

Sample ID: FH000-SB10412-10-96/0.0-1.5 (BKS104)

Matrix: Soil

Sample Depth: 0.0-1.5 FT

Field Sample Type: Grab

Collected: 12/10/96

| Metals                                            | Result | Detection Limit            | Units | Qualifiers          |
|---------------------------------------------------|--------|----------------------------|-------|---------------------|
| Arsenic                                           | 6.2    | 0.35                       | MG/KG |                     |
| Barium                                            | 28.2   | 0.08                       | MG/KG | *                   |
| Cadmium                                           | 0.15   | 0.04                       | MG/KG | B                   |
| Chromium                                          | 3.1    | 0.08                       | MG/KG | E*                  |
| Lead                                              | 5.3    | 0.15                       | MG/KG | EN*                 |
| Mercury                                           | 0.04   | 0.04                       | MG/KG | U                   |
| Selenium                                          | 0.32   | 0.32                       | MG/KG | U                   |
| Silver                                            | 0.2    | 0.20                       | MG/KG | U                   |
| Sample ID: FH000-SB10512-10-96/4.0-6.0 (BKS105)   |        | Sample Depth: 4.0-6.0 FT   |       |                     |
| Matrix: Soil                                      |        | Field Sample Type: Grab    |       | Collected: 12/10/96 |
| Metals                                            | Result | Detection Limit            | Units | Qualifiers          |
| Arsenic                                           | 4.3    | 0.36                       | MG/KG |                     |
| Barium                                            | 23.4   | 0.09                       | MG/KG | *                   |
| Cadmium                                           | 0.11   | 0.04                       | MG/KG | B                   |
| Chromium                                          | 4      | 0.09                       | MG/KG | E*                  |
| Lead                                              | 3.9    | 0.15                       | MG/KG | EN*                 |
| Mercury                                           | 0.04   | 0.04                       | MG/KG | U                   |
| Selenium                                          | 0.33   | 0.33                       | MG/KG | U                   |
| Silver                                            | 0.21   | 0.21                       | MG/KG | U                   |
| Sample ID: FH000-SB10612-10-96/9.0-9.4 (BKS106)   |        | Sample Depth: 9.0-9.4 FT   |       |                     |
| Matrix: Soil                                      |        | Field Sample Type: Grab    |       | Collected: 12/10/96 |
| Metals                                            | Result | Detection Limit            | Units | Qualifiers          |
| Arsenic                                           | 4.4    | 0.37                       | MG/KG |                     |
| Barium                                            | 43.7   | 0.09                       | MG/KG | *                   |
| Cadmium                                           | 0.16   | 0.04                       | MG/KG | B                   |
| Chromium                                          | 7.6    | 0.09                       | MG/KG | E*                  |
| Lead                                              | 5      | 0.16                       | MG/KG | EN*                 |
| Mercury                                           | 0.04   | 0.04                       | MG/KG | U                   |
| Selenium                                          | 0.33   | 0.33                       | MG/KG | U                   |
| Silver                                            | 0.21   | 0.21                       | MG/KG | U                   |
| Sample ID: FH000-SB10712-10-96/14.0-15.0 (BKS107) |        | Sample Depth: 14.0-15.0 FT |       |                     |
| Matrix: Soil                                      |        | Field Sample Type: Grab    |       | Collected: 12/10/96 |
| Metals                                            | Result | Detection Limit            | Units | Qualifiers          |
| Arsenic                                           | 53     | 0.39                       | MG/KG |                     |
| Barium                                            | 1350   | 0.09                       | MG/KG | *                   |
| Cadmium                                           | 0.35   | 0.05                       | MG/KG | B                   |
| Chromium                                          | 5.1    | 0.09                       | MG/KG | E*                  |
| Lead                                              | 6.1    | 0.17                       | MG/KG | EN*                 |
| Mercury                                           | 0.04   | 0.04                       | MG/KG | U                   |
| Selenium                                          | 0.36   | 0.36                       | MG/KG | U                   |
| Silver                                            | 0.23   | 0.23                       | MG/KG | U                   |

# Ft. Hood RCRA Facility Investigation

## FH-BKG Fort Hood Background

### Analytical Results

Station: SB104 Background Soil Boring SB104

Sample ID: FH000-SB10812-11-96/0.0-1.0 (BKSB108)

Matrix: Soil

Sample Depth: 0.0-1.0 FT

Field Sample Type: Grab

Collected: 12/11/96

| Metals   | Result | Detection Limit | Units | Qualifiers |
|----------|--------|-----------------|-------|------------|
|          |        |                 |       | Lab Data   |
| Arsenic  | 6      | 0.40            | MG/KG |            |
| Barium   | 72.4   | 0.10            | MG/KG | *          |
| Cadmium  | 0.2    | 0.05            | MG/KG | B          |
| Chromium | 12.9   | 0.10            | MG/KG | E*         |
| Lead     | 9.8    | 0.17            | MG/KG | EN*        |
| Mercury  | 0.04   | 0.04            | MG/KG | U          |
| Selenium | 0.37   | 0.37            | MG/KG | U          |
| Silver   | 0.23   | 0.23            | MG/KG | U          |

Sample ID: FH000-SB10912-11-96/4.0-5.0 (BKSB109)

Matrix: Soil

Sample Depth: 4.0-5.0 FT

Field Sample Type: Grab

Collected: 12/11/96

| Metals   | Result | Detection Limit | Units | Qualifiers |
|----------|--------|-----------------|-------|------------|
|          |        |                 |       | Lab Data   |
| Arsenic  | 3.5    | 0.38            | MG/KG |            |
| Barium   | 155    | 0.09            | MG/KG | *          |
| Cadmium  | 0.07   | 0.05            | MG/KG | B          |
| Chromium | 6.5    | 0.09            | MG/KG | E*         |
| Lead     | 3.2    | 0.16            | MG/KG | EN*        |
| Mercury  | 0.04   | 0.04            | MG/KG | U          |
| Selenium | 0.34   | 0.34            | MG/KG | U          |
| Silver   | 0.22   | 0.22            | MG/KG | U          |

Sample ID: FH000-SB11012-11-96/11.0-11.5 (BKSB110)

Matrix: Soil

Sample Depth: 11.0-11.5 FT

Field Sample Type: Grab

Collected: 12/11/96

| Metals   | Result | Detection Limit | Units | Qualifiers |
|----------|--------|-----------------|-------|------------|
|          |        |                 |       | Lab Data   |
| Arsenic  | 4.8    | 0.40            | MG/KG |            |
| Barium   | 24.1   | 0.10            | MG/KG | *          |
| Cadmium  | 0.06   | 0.05            | MG/KG | B          |
| Chromium | 16.6   | 0.10            | MG/KG | E*         |
| Lead     | 7.8    | 0.17            | MG/KG | EN*        |
| Mercury  | 0.04   | 0.04            | MG/KG | U          |
| Selenium | 0.36   | 0.36            | MG/KG | U          |
| Silver   | 0.23   | 0.23            | MG/KG | U          |

Sample ID: FH000-SB11112-11-96/18.0-18.5 (BKSB111)

Matrix: Soil

Sample Depth: 18.0-18.5 FT

Field Sample Type: Grab

Collected: 12/11/96

| Metals   | Result | Detection Limit | Units | Qualifiers |
|----------|--------|-----------------|-------|------------|
|          |        |                 |       | Lab Data   |
| Arsenic  | 5.2    | 0.38            | MG/KG |            |
| Barium   | 7.2    | 0.09            | MG/KG | *          |
| Cadmium  | 0.05   | 0.05            | MG/KG | B          |
| Chromium | 6.2    | 0.09            | MG/KG | E*         |
| Lead     | 5.3    | 0.16            | MG/KG | EN*        |
| Mercury  | 0.04   | 0.04            | MG/KG | U          |
| Selenium | 0.35   | 0.35            | MG/KG | U          |
| Silver   | 0.22   | 0.22            | MG/KG | U          |

**Ft. Hood RCRA Facility Investigation**  
**FH-BKG Fort Hood Background**  
**Analytical Results**

Station: SB105 Background Soil Boring SB105

Sample ID: FH000-SB11212-11-96/1.0-1.5 (BKS112)

Matrix: Soil

Sample Depth: 1.0-1.5 FT

Field Sample Type: Grab

Collected: 12/11/96

| Metals   | Result | Detection Limit | Units | Qualifiers |      |
|----------|--------|-----------------|-------|------------|------|
|          |        |                 |       | Lab        | Data |
| Arsenic  | 1.6    | 0.35            | MG/KG | *          | J    |
| Barium   | 6.6    | 0.09            | MG/KG | U          | U    |
| Cadmium  | 0.04   | 0.04            | MG/KG | E*         | J    |
| Chromium | 4      | 0.09            | MG/KG | EN*        | J    |
| Lead     | 1.5    | 0.15            | MG/KG | U          | U    |
| Mercury  | 0.04   | 0.04            | MG/KG | U          | U    |
| Selenium | 0.32   | 0.32            | MG/KG | U          | U    |
| Silver   | 0.2    | 0.20            | MG/KG | U          | U    |

Sample ID: FH000-SB11312-11-96/4.0-5.0 (BKS113)

Matrix: Soil

Sample Depth: 4.0-5.0 FT

Field Sample Type: Grab

Collected: 12/11/96

| Metals   | Result | Detection Limit | Units | Qualifiers |      |
|----------|--------|-----------------|-------|------------|------|
|          |        |                 |       | Lab        | Data |
| Arsenic  | 5.7    | 0.40            | MG/KG | *          | J    |
| Barium   | 20.5   | 0.10            | MG/KG | U          | U    |
| Cadmium  | 0.07   | 0.05            | MG/KG | B          |      |
| Chromium | 8.9    | 0.10            | MG/KG | E*         | J    |
| Lead     | 6      | 0.17            | MG/KG | EN*        | J    |
| Mercury  | 0.04   | 0.04            | MG/KG | U          | U    |
| Selenium | 0.36   | 0.36            | MG/KG | U          | U    |
| Silver   | 0.23   | 0.23            | MG/KG | U          | U    |

Sample ID: FH000-SB11412-11-96/11.0-12.0 (BKS114)

Matrix: Soil

Sample Depth: 11.0-12.0 FT

Field Sample Type: Grab

Collected: 12/11/96

| Metals   | Result | Detection Limit | Units | Qualifiers |      |
|----------|--------|-----------------|-------|------------|------|
|          |        |                 |       | Lab        | Data |
| Arsenic  | 5.2    | 0.42            | MG/KG | *          | J    |
| Barium   | 25.2   | 0.10            | MG/KG | U          | U    |
| Cadmium  | 0.05   | 0.05            | MG/KG | E*         | J    |
| Chromium | 20.3   | 0.10            | MG/KG | EN*        | J    |
| Lead     | 7.7    | 0.18            | MG/KG | U          | U    |
| Mercury  | 0.04   | 0.04            | MG/KG | U          | U    |
| Selenium | 0.38   | 0.38            | MG/KG | U          | U    |
| Silver   | 0.24   | 0.24            | MG/KG | U          | U    |

Sample ID: FH000-SB11512-11-96/15.0-15.5 (BKS115)

Matrix: Soil

Sample Depth: 15.0-15.5 FT

Field Sample Type: Grab

Collected: 12/11/96

| Metals   | Result | Detection Limit | Units | Qualifiers |      |
|----------|--------|-----------------|-------|------------|------|
|          |        |                 |       | Lab        | Data |
| Arsenic  | 5.3    | 0.36            | MG/KG | *          | J    |
| Barium   | 10.6   | 0.09            | MG/KG | U          | U    |
| Cadmium  | 0.06   | 0.04            | MG/KG | B          |      |
| Chromium | 7.3    | 0.09            | MG/KG | E*         | J    |
| Lead     | 5.1    | 0.15            | MG/KG | EN*        | J    |
| Mercury  | 0.04   | 0.04            | MG/KG | U          | U    |
| Selenium | 0.32   | 0.32            | MG/KG | U          | U    |
| Silver   | 0.2    | 0.20            | MG/KG | U          | U    |

# Ft. Hood RCRA Facility Investigation

## FH-BKG Fort Hood Background

### Analytical Results

Sample ID: FH000-SB11612-11-96/22.0-22.5 (BKSB116)  
 Matrix: Soil

Sample Depth: 22.0-22.5 FT

Field Sample Type: Grab

Collected: 12/11/96

| Metals   | Result | Detection Limit | Units | Qualifiers |      |
|----------|--------|-----------------|-------|------------|------|
|          |        |                 |       | Lab        | Data |
| Arsenic  | 11.6   | 0.37            | MG/KG |            |      |
| Barium   | 4.9    | 0.09            | MG/KG | *          | J    |
| Cadmium  | 0.2    | 0.04            | MG/KG | B          |      |
| Chromium | 2.7    | 0.09            | MG/KG | E*         | J    |
| Lead     | 5.6    | 0.16            | MG/KG | EN*        | J    |
| Mercury  | 0.04   | 0.04            | MG/KG | U          | U    |
| Selenium | 0.33   | 0.33            | MG/KG | U          | U    |
| Silver   | 0.21   | 0.21            | MG/KG | U          | U    |

**Ft. Hood RCRA Facility Investigation**  
**FH-BKG Fort Hood Background**  
**Analytical Results**

Station: SB106 Background Soil Boring SB106

Sample ID: FH000-SB11712-12-96/0.0-1.0 (BKSB117)

Matrix: Soil

Sample Depth: 0.0-1.0 FT

Field Sample Type: Grab

Collected: 12/12/96

| Metals   | Result | Detection Limit | Units | Qualifiers |
|----------|--------|-----------------|-------|------------|
|          |        |                 |       | Lab Data   |
| Arsenic  | 4.4    | 0.37            | MG/KG |            |
| Barium   | 27.9   | 0.09            | MG/KG | *          |
| Cadmium  | 0.18   | 0.04            | MG/KG | B          |
| Chromium | 5.7    | 0.09            | MG/KG | E*         |
| Lead     | 8.3    | 0.16            | MG/KG | EN*        |
| Mercury  | 0.04   | 0.04            | MG/KG | U          |
| Selenium | 0.33   | 0.33            | MG/KG | U          |
| Silver   | 0.21   | 0.21            | MG/KG | U          |

Sample ID: FH000-SB11812-12-96/9.0-9.5 (BKSB118)

Matrix: Soil

Sample Depth: 9.0-9.5 FT

Field Sample Type: Grab

Collected: 12/12/96

| Metals   | Result | Detection Limit | Units | Qualifiers |
|----------|--------|-----------------|-------|------------|
|          |        |                 |       | Lab Data   |
| Arsenic  | 2.6    | 0.37            | MG/KG |            |
| Barium   | 4.4    | 0.09            | MG/KG | *          |
| Cadmium  | 0.19   | 0.04            | MG/KG | B          |
| Chromium | 2.2    | 0.09            | MG/KG | E*         |
| Lead     | 3.7    | 0.16            | MG/KG | EN*        |
| Mercury  | 0.04   | 0.04            | MG/KG | U          |
| Selenium | 0.34   | 0.34            | MG/KG | U          |
| Silver   | 0.21   | 0.21            | MG/KG | U          |

Sample ID: FH000-SB11912-12-96/14.0-14.5 (BKSB119)

Matrix: Soil

Sample Depth: 14.0-14.5 FT

Field Sample Type: Grab

Collected: 12/12/96

| Metals   | Result | Detection Limit | Units | Qualifiers |
|----------|--------|-----------------|-------|------------|
|          |        |                 |       | Lab Data   |
| Arsenic  | 0.66   | 0.37            | MG/KG | B          |
| Barium   | 3      | 0.09            | MG/KG |            |
| Cadmium  | 0.06   | 0.04            | MG/KG | B          |
| Chromium | 2.1    | 0.09            | MG/KG |            |
| Lead     | 1.3    | 0.16            | MG/KG | EN         |
| Mercury  | 0.04   | 0.04            | MG/KG | U          |
| Selenium | 0.33   | 0.33            | MG/KG | U          |
| Silver   | 0.21   | 0.21            | MG/KG | U          |

Sample ID: FH000-SB12012-12-96/19.0-20.0 (BKSB120)

Matrix: Soil

Sample Depth: 19.0-20.0 FT

Field Sample Type: Grab

Collected: 12/12/96

| Metals   | Result | Detection Limit | Units | Qualifiers |
|----------|--------|-----------------|-------|------------|
|          |        |                 |       | Lab Data   |
| Arsenic  | 0.44   | 0.35            | MG/KG | B          |
| Barium   | 2      | 0.08            | MG/KG |            |
| Cadmium  | 0.04   | 0.04            | MG/KG | U          |
| Chromium | 0.93   | 0.08            | MG/KG | B          |
| Lead     | 0.72   | 0.15            | MG/KG | EN         |
| Mercury  | 0.04   | 0.04            | MG/KG | U          |
| Selenium | 0.32   | 0.32            | MG/KG | U          |
| Silver   | 0.2    | 0.20            | MG/KG | U          |

**Ft. Hood RCRA Facility Investigation**  
**FH-BKG Fort Hood Background**  
**Analytical Results**

Sample ID: FH000-SB20112-12-96/0.0-1.0

(BKS201)

Matrix: Soil

Sample Depth: 0.0-1.0 FT

Field Sample Type: Field Duplicate

Collected: 12/12/96

| Metals   | Result | Detection Limit | Units | Qualifiers |      |
|----------|--------|-----------------|-------|------------|------|
|          |        |                 |       | Lab        | Data |
| Arsenic  | 4.4    | 0.36            | MG/KG |            |      |
| Barium   | 17.9   | 0.09            | MG/KG |            |      |
| Cadmium  | 0.14   | 0.04            | MG/KG | B          |      |
| Chromium | 2.6    | 0.09            | MG/KG |            |      |
| Lead     | 5.9    | 0.15            | MG/KG | EN         | J    |
| Mercury  | 0.04   | 0.04            | MG/KG | U          | U    |
| Selenium | 0.33   | 0.33            | MG/KG | U          | U    |
| Silver   | 0.21   | 0.21            | MG/KG | U          | U    |

**Ft. Hood RCRA Facility Investigation**  
**FH-BKG Fort Hood Background**  
**Analytical Results**

Station: SB107 Background Soil Boring SB107

Sample ID: FH000-SB12412-12-96/0.0-1.0 (BKSB124)

Matrix: Soil

Sample Depth: 0.0-1.0 FT

Field Sample Type: Grab

Collected: 12/12/96

| Metals   | Result | Detection Limit | Units | Qualifiers |
|----------|--------|-----------------|-------|------------|
|          |        |                 |       | Lab Data   |
| Arsenic  | 6      | 0.37            | MG/KG |            |
| Barium   | 19.3   | 0.09            | MG/KG |            |
| Cadmium  | 0.11   | 0.04            | MG/KG | B          |
| Chromium | 7.2    | 0.09            | MG/KG |            |
| Lead     | 4.5    | 0.16            | MG/KG | EN J       |
| Mercury  | 0.04   | 0.04            | MG/KG | U U        |
| Selenium | 0.34   | 0.34            | MG/KG | U U        |
| Silver   | 0.21   | 0.21            | MG/KG | U U        |

Sample ID: FH000-SB12512-12-96/4.0-4.5 (BKSB125)

Matrix: Soil

Sample Depth: 4.0-4.5 FT

Field Sample Type: Grab

Collected: 12/12/96

| Metals   | Result | Detection Limit | Units | Qualifiers |
|----------|--------|-----------------|-------|------------|
|          |        |                 |       | Lab Data   |
| Arsenic  | 3.2    | 0.35            | MG/KG |            |
| Barium   | 18.1   | 0.09            | MG/KG |            |
| Cadmium  | 0.11   | 0.04            | MG/KG | B          |
| Chromium | 5.1    | 0.09            | MG/KG |            |
| Lead     | 1.7    | 0.15            | MG/KG | EN J       |
| Mercury  | 0.04   | 0.04            | MG/KG | U U        |
| Selenium | 0.36   | 0.32            | MG/KG | B          |
| Silver   | 0.2    | 0.20            | MG/KG | U U        |

Sample ID: FH000-SB12612-12-96/5.5-6.0 (BKSB126)

Matrix: Soil

Sample Depth: 5.5-6.0 FT

Field Sample Type: Grab

Collected: 12/12/96

| Metals   | Result | Detection Limit | Units | Qualifiers |
|----------|--------|-----------------|-------|------------|
|          |        |                 |       | Lab Data   |
| Arsenic  | 2.5    | 0.36            | MG/KG |            |
| Barium   | 5.4    | 0.09            | MG/KG |            |
| Cadmium  | 0.06   | 0.04            | MG/KG | B          |
| Chromium | 5.5    | 0.09            | MG/KG |            |
| Lead     | 1.5    | 0.15            | MG/KG | EN J       |
| Mercury  | 0.04   | 0.04            | MG/KG | U U        |
| Selenium | 0.44   | 0.33            | MG/KG | B          |
| Silver   | 0.21   | 0.21            | MG/KG | U U        |

Sample ID: FH000-SB20312-12-96/0.0-1.0 (BKSB203)

Matrix: Soil

Sample Depth: 0.0-1.0 FT

Field Sample Type: Field Duplicate

Collected: 12/12/96

| Metals   | Result | Detection Limit | Units | Qualifiers |
|----------|--------|-----------------|-------|------------|
|          |        |                 |       | Lab Data   |
| Arsenic  | 5.9    | 0.37            | MG/KG |            |
| Barium   | 39     | 0.09            | MG/KG |            |
| Cadmium  | 0.17   | 0.05            | MG/KG | B          |
| Chromium | 9.3    | 0.09            | MG/KG |            |
| Lead     | 6.6    | 0.16            | MG/KG | EN J       |
| Mercury  | 0.04   | 0.04            | MG/KG | U U        |
| Selenium | 0.34   | 0.34            | MG/KG | U U        |
| Silver   | 0.21   | 0.21            | MG/KG | U U        |

**Ft. Hood RCRA Facility Investigation**  
**FH-BKG Fort Hood Background**  
**Analytical Results**

Station: SB108 Background Soil Boring SB108

Sample ID: FH000-SB135/01-14-97/0.0-1.0 (BKSB135)

Matrix: Soil

Sample Depth: 0.0-1.0 FT

Field Sample Type: Grab

Collected: 01/14/97

| Metals   | Result | Detection Limit | Units | Qualifiers |      |
|----------|--------|-----------------|-------|------------|------|
|          |        |                 |       | Lab        | Data |
| Arsenic  | 2.7    | 0.36            | MG/KG |            |      |
| Barium   | 15.4   | 0.09            | MG/KG | *          | J    |
| Cadmium  | 0.17   | 0.04            | MG/KG | B*         | J    |
| Chromium | 6.1    | 0.09            | MG/KG |            |      |
| Lead     | 2.5    | 0.15            | MG/KG | *          | J    |
| Mercury  | 0.04   | 0.04            | MG/KG | U          | U    |
| Selenium | 1.5    | 1.5             | MG/KG | UWN        | R    |
| Silver   | 0.21   | 0.21            | MG/KG | U          | U    |

Sample ID: FH000-SB136/01-14-97/5.0-5.5 (BKSB136)

Matrix: Soil

Sample Depth: 5.0-5.5 FT

Field Sample Type: Grab

Collected: 01/14/97

| Metals   | Result | Detection Limit | Units | Qualifiers |      |
|----------|--------|-----------------|-------|------------|------|
|          |        |                 |       | Lab        | Data |
| Arsenic  | 4.3    | 0.38            | MG/KG |            |      |
| Barium   | 14.8   | 0.09            | MG/KG | *          | J    |
| Cadmium  | 0.2    | 0.05            | MG/KG | B*         | J    |
| Chromium | 8.3    | 0.09            | MG/KG |            |      |
| Lead     | 3      | 0.16            | MG/KG | *          | J    |
| Mercury  | 0.04   | 0.04            | MG/KG | U          | U    |
| Selenium | 0.32   | 0.32            | MG/KG | UWN        | R    |
| Silver   | 0.22   | 0.22            | MG/KG | U          | U    |

Sample ID: FH000-SB137/01-14-97/9.0-9.5 (BKSB137)

Matrix: Soil

Sample Depth: 9.0-9.5 FT

Field Sample Type: Grab

Collected: 01/14/97

| Metals   | Result | Detection Limit | Units | Qualifiers |      |
|----------|--------|-----------------|-------|------------|------|
|          |        |                 |       | Lab        | Data |
| Arsenic  | 8.2    | 0.36            | MG/KG | *          |      |
| Barium   | 7.8    | 0.09            | MG/KG |            | J    |
| Cadmium  | 0.18   | 0.04            | MG/KG | B*         | J    |
| Chromium | 8.1    | 0.09            | MG/KG |            |      |
| Lead     | 2.3    | 0.15            | MG/KG | *          | J    |
| Mercury  | 0.04   | 0.04            | MG/KG | U          | U    |
| Selenium | 0.31   | 0.31            | MG/KG | UWN        | R    |
| Silver   | 0.21   | 0.21            | MG/KG | U          | U    |

Sample ID: FH000-SB138/01-14-97/14.0-14.5 (BKSB138)

Matrix: Soil

Sample Depth: 14.0-14.5 FT

Field Sample Type: Grab

Collected: 01/14/97

| Metals   | Result | Detection Limit | Units | Qualifiers |      |
|----------|--------|-----------------|-------|------------|------|
|          |        |                 |       | Lab        | Data |
| Arsenic  | 9.2    | 0.38            | MG/KG |            |      |
| Barium   | 12.2   | 0.09            | MG/KG | *          | J    |
| Cadmium  | 0.21   | 0.05            | MG/KG | B*         | J    |
| Chromium | 11.1   | 0.09            | MG/KG |            |      |
| Lead     | 4.1    | 0.16            | MG/KG | *          | J    |
| Mercury  | 0.04   | 0.04            | MG/KG | U          | U    |
| Selenium | 0.32   | 0.32            | MG/KG | UWN        | R    |
| Silver   | 0.22   | 0.22            | MG/KG | U          | U    |

**Ft. Hood RCRA Facility Investigation**  
**FH-BKG Fort Hood Background**  
**Analytical Results**

Sample ID: FH000-SB139/01-14-97/16.5-17.0 (BKS139)

Matrix: Soil

Sample Depth: 16.5-17.0 FT

Field Sample Type: Grab

Collected: 01/14/97

| Metals   | Result | Detection Limit | Units | Qualifiers |      |
|----------|--------|-----------------|-------|------------|------|
|          |        |                 |       | Lab        | Data |
| Arsenic  | 7.6    | 0.37            | MG/KG |            |      |
| Barium   | 7.3    | 0.09            | MG/KG | *          | J    |
| Cadmium  | 0.2    | 0.04            | MG/KG | B*         | J    |
| Chromium | 8.4    | 0.09            | MG/KG |            |      |
| Lead     | 3.6    | 0.16            | MG/KG | *          | J    |
| Mercury  | 0.04   | 0.04            | MG/KG | U          | U    |
| Selenium | 0.31   | 0.31            | MG/KG | UWN        | R    |
| Silver   | 0.21   | 0.21            | MG/KG | U          | U    |

# Ft. Hood RCRA Facility Investigation

## FH-BKG Fort Hood Background

### Analytical Results

Station: SB109 Background Soil Boring SB109

Sample ID: FH000-SB140/01-15-97/0.0-1.0 (BKSB140)

Matrix: Soil

Sample Depth: 0.0-1.0 FT

Field Sample Type: Grab

Collected: 01/15/97

| Metals   | Result | Detection Limit | Units | Qualifiers |      |
|----------|--------|-----------------|-------|------------|------|
|          |        |                 |       | Lab        | Data |
| Arsenic  | 4.8    | 0.41            | MG/KG |            |      |
| Barium   | 108    | 0.10            | MG/KG | *          | J    |
| Cadmium  | 0.79   | 0.05            | MG/KG | *          | J    |
| Chromium | 16.1   | 0.10            | MG/KG |            |      |
| Lead     | 33.2   | 0.17            | MG/KG | *          | J    |
| Mercury  | 0.04   | 0.04            | MG/KG | U          | U    |
| Selenium | 0.35   | 0.35            | MG/KG | UWN        | R    |
| Silver   | 0.24   | 0.24            | MG/KG | U          | U    |

Sample ID: FH000-SB141/01-15-97/4.0-5.0 (BKSB141)

Matrix: Soil

Sample Depth: 4.0-5.0 FT

Field Sample Type: Grab

Collected: 01/15/97

| Metals   | Result | Detection Limit | Units | Qualifiers |      |
|----------|--------|-----------------|-------|------------|------|
|          |        |                 |       | Lab        | Data |
| Arsenic  | 5.6    | 0.43            | MG/KG |            |      |
| Barium   | 127    | 0.10            | MG/KG | *          | J    |
| Cadmium  | 0.45   | 0.05            | MG/KG | B*         | J    |
| Chromium | 23.6   | 0.10            | MG/KG |            |      |
| Lead     | 12.1   | 0.18            | MG/KG | *          | J    |
| Mercury  | 0.04   | 0.04            | MG/KG | U          | U    |
| Selenium | 1.8    | 1.8             | MG/KG | UN         | R    |
| Silver   | 0.25   | 0.25            | MG/KG | U          | U    |

Sample ID: FH000-SB142/01-15-97/9.0-10.0 (BKSB142)

Matrix: Soil

Sample Depth: 9.0-10.0 FT

Field Sample Type: Grab

Collected: 01/15/97

| Metals   | Result | Detection Limit | Units | Qualifiers |      |
|----------|--------|-----------------|-------|------------|------|
|          |        |                 |       | Lab        | Data |
| Arsenic  | 3.8    | 0.44            | MG/KG |            |      |
| Barium   | 63     | 0.11            | MG/KG | *          | J    |
| Cadmium  | 0.29   | 0.05            | MG/KG | B*         | J    |
| Chromium | 8.4    | 0.11            | MG/KG |            |      |
| Lead     | 5      | 0.19            | MG/KG | *          | J    |
| Mercury  | 0.04   | 0.04            | MG/KG | U          | U    |
| Selenium | 1.9    | 1.9             | MG/KG | UWN        | R    |
| Silver   | 0.25   | 0.25            | MG/KG | U          | U    |

Sample ID: FH000-SB143/01-15-97/14.5-15.0 (BKSB143)

Matrix: Soil

Sample Depth: 14.5-15.0 FT

Field Sample Type: Grab

Collected: 01/15/97

| Metals   | Result | Detection Limit | Units | Qualifiers |      |
|----------|--------|-----------------|-------|------------|------|
|          |        |                 |       | Lab        | Data |
| Arsenic  | 3.8    | 0.41            | MG/KG |            |      |
| Barium   | 39.3   | 0.10            | MG/KG | *          | J    |
| Cadmium  | 0.27   | 0.05            | MG/KG | B*         | J    |
| Chromium | 12.2   | 0.10            | MG/KG |            |      |
| Lead     | 6.6    | 0.17            | MG/KG | *          | J    |
| Mercury  | 0.04   | 0.04            | MG/KG | U          | U    |
| Selenium | 0.35   | 0.35            | MG/KG | UWN        | R    |
| Silver   | 0.24   | 0.24            | MG/KG | U          | U    |

# Ft. Hood RCRA Facility Investigation

## FH-BKG Fort Hood Background

### Analytical Results

Sample ID: FH000-SB144/01-15-97/19.0-19.3 (BKS144)

Matrix: Soil

Sample Depth: 19.0-19.3 FT

Field Sample Type: Grab

Collected: 01/15/97

| Metals   | Result | Detection Limit | Units | Qualifiers |      |
|----------|--------|-----------------|-------|------------|------|
|          |        |                 |       | Lab        | Data |
| Arsenic  | 3.7    | 0.37            | MG/KG |            |      |
| Barium   | 36.1   | 0.09            | MG/KG | *          | J    |
| Cadmium  | 0.2    | 0.04            | MG/KG | B*         | J    |
| Chromium | 6.5    | 0.09            | MG/KG |            |      |
| Lead     | 4      | 0.16            | MG/KG | *          | J    |
| Mercury  | 0.04   | 0.04            | MG/KG | U          | U    |
| Selenium | 0.31   | 0.31            | MG/KG | UWN        | R    |
| Silver   | 0.21   | 0.21            | MG/KG | U          | U    |

**Ft. Hood RCRA Facility Investigation**  
**FH-BKG Fort Hood Background**  
**Analytical Results**

Station: SB110      Background Soil Boring SB110

Sample ID: FH000-SB12712-13-96/0.0-1.0      (BKSB127)

Matrix: Soil

Sample Depth: 0.0-1.0 FT

Field Sample Type: Grab

Collected: 12/13/96

| Metals   | Result | Detection Limit | Units | Qualifiers |      |
|----------|--------|-----------------|-------|------------|------|
|          |        |                 |       | Lab        | Data |
| Arsenic  | 1.9    | 0.36            | MG/KG |            |      |
| Barium   | 18.8   | 0.09            | MG/KG |            |      |
| Cadmium  | 0.04   | 0.04            | MG/KG | U          | U    |
| Chromium | 3.7    | 0.09            | MG/KG |            |      |
| Lead     | 3.8    | 0.15            | MG/KG | EN         | J    |
| Mercury  | 0.04   | 0.04            | MG/KG | U          | U    |
| Selenium | 0.33   | 0.33            | MG/KG | U          | U    |
| Silver   | 0.21   | 0.21            | MG/KG | U          | U    |

Sample ID: FH000-SB12812-13-96/4.0-6.0      (BKSB128)

Matrix: Soil

Sample Depth: 4.0-6.0 FT

Field Sample Type: Grab

Collected: 12/13/96

| Metals   | Result | Detection Limit | Units | Qualifiers |      |
|----------|--------|-----------------|-------|------------|------|
|          |        |                 |       | Lab        | Data |
| Arsenic  | 3.6    | 0.38            | MG/KG |            |      |
| Barium   | 36.3   | 0.09            | MG/KG |            |      |
| Cadmium  | 0.05   | 0.05            | MG/KG | U          | U    |
| Chromium | 8.5    | 0.09            | MG/KG |            |      |
| Lead     | 7.5    | 0.16            | MG/KG | EN         | J    |
| Mercury  | 0.04   | 0.04            | MG/KG |            |      |
| Selenium | 0.35   | 0.35            | MG/KG | U          | U    |
| Silver   | 0.22   | 0.22            | MG/KG | U          | U    |

Sample ID: FH000-SB12912-13-96/10.0-11.0      (BKSB129)

Matrix: Soil

Sample Depth: 10.0-11.0 FT

Field Sample Type: Grab

Collected: 12/13/96

| Metals   | Result | Detection Limit | Units | Qualifiers |      |
|----------|--------|-----------------|-------|------------|------|
|          |        |                 |       | Lab        | Data |
| Arsenic  | 2.6    | 0.36            | MG/KG |            |      |
| Barium   | 26.3   | 0.09            | MG/KG |            |      |
| Cadmium  | 0.04   | 0.04            | MG/KG | U          | U    |
| Chromium | 4.6    | 0.09            | MG/KG |            |      |
| Lead     | 4.1    | 0.15            | MG/KG | EN         | J    |
| Mercury  | 0.04   | 0.04            | MG/KG | U          | U    |
| Selenium | 0.33   | 0.33            | MG/KG | U          | U    |
| Silver   | 0.21   | 0.21            | MG/KG | U          | U    |

Sample ID: FH000-SB13012-13-96/15.0-16.0      (BKSB130)

Matrix: Soil

Sample Depth: 15.0-16.0 FT

Field Sample Type: Grab

Collected: 12/13/96

| Metals   | Result | Detection Limit | Units | Qualifiers |      |
|----------|--------|-----------------|-------|------------|------|
|          |        |                 |       | Lab        | Data |
| Arsenic  | 1      | 0.35            | MG/KG | B          |      |
| Barium   | 8.1    | 0.08            | MG/KG |            |      |
| Cadmium  | 0.07   | 0.04            | MG/KG | B          |      |
| Chromium | 1.8    | 0.08            | MG/KG |            |      |
| Lead     | 3.1    | 0.15            | MG/KG | EN         | J    |
| Mercury  | 0.04   | 0.04            | MG/KG | U          | U    |
| Selenium | 0.32   | 0.32            | MG/KG | U          | U    |
| Silver   | 0.2    | 0.20            | MG/KG | U          | U    |

**Ft. Hood RCRA Facility Investigation**  
**FH-BKG Fort Hood Background**  
**Analytical Results**

Sample ID: FH000-SB13112-13-96/20.0-21.0 (BKS131)  
Matrix: Soil

Sample Depth: 20.0-21.0 FT

Field Sample Type: Grab

Collected: 12/13/96

| Metals   | Result | Detection Limit | Units | Qualifiers |
|----------|--------|-----------------|-------|------------|
|          |        |                 |       | Lab Data   |
| Arsenic  | 5.3    | 0.38            | MG/KG |            |
| Barium   | 65.9   | 0.09            | MG/KG |            |
| Cadmium  | 0.15   | 0.05            | MG/KG | B          |
| Chromium | 7.7    | 0.09            | MG/KG |            |
| Lead     | 10.1   | 0.16            | MG/KG | EN J       |
| Mercury  | 0.04   | 0.04            | MG/KG | U U        |
| Selenium | 0.34   | 0.34            | MG/KG | U U        |
| Silver   | 0.22   | 0.22            | MG/KG | U U        |

Sample ID: FH000-SB13212-13-96/25.0-26.0 (BKS132)  
Matrix: Soil

Sample Depth: 25.0-26.0 FT

Field Sample Type: Grab

Collected: 12/13/96

| Metals   | Result | Detection Limit | Units | Qualifiers |
|----------|--------|-----------------|-------|------------|
|          |        |                 |       | Lab Data   |
| Arsenic  | 4.2    | 0.37            | MG/KG |            |
| Barium   | 41.7   | 0.09            | MG/KG |            |
| Cadmium  | 0.04   | 0.04            | MG/KG | U U        |
| Chromium | 5.9    | 0.09            | MG/KG |            |
| Lead     | 7.8    | 0.16            | MG/KG | EN J       |
| Mercury  | 0.04   | 0.04            | MG/KG | U U        |
| Selenium | 0.34   | 0.34            | MG/KG | U U        |
| Silver   | 0.21   | 0.21            | MG/KG | U U        |

Sample ID: FH000-SB13312-13-96/30.0-31.0 (BKS133)  
Matrix: Soil

Sample Depth: 30.0-31.0 FT

Field Sample Type: Grab

Collected: 12/13/96

| Metals   | Result | Detection Limit | Units | Qualifiers |
|----------|--------|-----------------|-------|------------|
|          |        |                 |       | Lab Data   |
| Arsenic  | 3.2    | 0.39            | MG/KG |            |
| Barium   | 68.6   | 0.09            | MG/KG |            |
| Cadmium  | 0.11   | 0.05            | MG/KG | B          |
| Chromium | 4.9    | 0.09            | MG/KG |            |
| Lead     | 6.3    | 0.17            | MG/KG | EN J       |
| Mercury  | 0.04   | 0.04            | MG/KG | U U        |
| Selenium | 0.35   | 0.35            | MG/KG | U U        |
| Silver   | 0.22   | 0.22            | MG/KG | U U        |

Sample ID: FH000-SB13412-13-96/34.0-34.5 (BKS134)  
Matrix: Soil

Sample Depth: 34.0-34.5 FT

Field Sample Type: Grab

Collected: 12/13/96

| Metals   | Result | Detection Limit | Units | Qualifiers |
|----------|--------|-----------------|-------|------------|
|          |        |                 |       | Lab Data   |
| Arsenic  | 2.9    | 0.36            | MG/KG |            |
| Barium   | 20.1   | 0.09            | MG/KG |            |
| Cadmium  | 0.08   | 0.04            | MG/KG | B          |
| Chromium | 1.2    | 0.09            | MG/KG |            |
| Lead     | 2.3    | 0.15            | MG/KG | EN J       |
| Mercury  | 0.04   | 0.04            | MG/KG | U U        |
| Selenium | 0.33   | 0.33            | MG/KG | U U        |
| Silver   | 0.21   | 0.21            | MG/KG | U U        |

# Ft. Hood RCRA Facility Investigation

## FH-BKG Fort Hood Background

### Analytical Results

Sample ID: FH000-SB20412-13-96/4.0-6.0

(BKS204)

Matrix: Soil

Sample Depth: 4.0-6.0 FT

Field Sample Type: Field Duplicate

Collected: 12/13/96

| Metals   | Result | Detection Limit | Units | Qualifiers |      |
|----------|--------|-----------------|-------|------------|------|
|          |        |                 |       | Lab        | Data |
| Arsenic  | 3.2    | 0.38            | MG/KG |            |      |
| Barium   | 31.9   | 0.09            | MG/KG |            |      |
| Cadmium  | 0.05   | 0.05            | MG/KG | U          | U    |
| Chromium | 6.5    | 0.09            | MG/KG |            |      |
| Lead     | 7.1    | 0.16            | MG/KG | EN         | J    |
| Mercury  | 0.04   | 0.04            | MG/KG | U          | U    |
| Selenium | 0.35   | 0.35            | MG/KG | U          | U    |
| Silver   | 0.22   | 0.22            | MG/KG | U          | U    |

## **APPENDIX D**

### **Fort Hood RFI Background Soil Boring Logs**



RCRA  
Facilities  
Investigation  
Fort Hood, Texas

U. S. Army Corp of Engineers  
Fort Worth District  
Fort Worth, Texas

## Boring FHBKG-SB101

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FHBKG : Background  
Start Date : 12/10/96  
End Date : 12/10/96  
Northing Coord. : 3446458.08 m  
Easting Coord. : 61375.50 m UTM 14 North  
Total Depth of Boring : 18.5 feet

Drilling Company : Terra-Mar  
Driller : Bill Christopher  
Designation of Drill : Mobile Drill B-59  
Type of Drill Rig : Hollow Stem Auger  
Geologist : Jeff DeVaughn  
Depth to Bedrock : 15.0 feet  
Depth Drilled Into Rock: 3.5 feet  
Borehole Diameter : 8 inches  
Sampling Equipment : 4.25" Augers  
: CME Sampler 5' long

| Depth in feet | Surf. Elev.<br>887.80ft | USCS | GRAPHIC | Water Levels | DESCRIPTION                                                                                                     | REMARKS                                                          |
|---------------|-------------------------|------|---------|--------------|-----------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| 0             |                         |      |         |              | Topsoil. 0.0-0.5' bgs.; weathered tan limestone.                                                                | No sample recovery.                                              |
| 1             | 887                     |      |         |              | CLAY; weathered limestone fragments; damp; soft; moderately plastic; 10YR5/4 yellowish brown.                   |                                                                  |
| 2             | 886                     |      |         |              | Same as above; dry.                                                                                             | Sample BKS101 collected 2.0-2.5' bgs.                            |
| 3             | 885                     |      |         |              | Same as above; dry; more weathered limestone.                                                                   | Description from soil cuttings.                                  |
| 4             | 884                     |      |         |              | CLAY, fat; fewer fragments; damp; firm; highly plastic; mottled 10YR6/6 brownish yellow and 2.5Y7/1 light gray. | Sample BKS102 collected 4.0-4.7' bgs.                            |
| 5             | 883                     |      |         |              | Same CLAY as above; more silty; interbedded with weathered limestone; dry.                                      | Description from soil cuttings.                                  |
| 6             | 882                     |      |         |              |                                                                                                                 |                                                                  |
| 7             | 881                     |      |         |              |                                                                                                                 |                                                                  |
| 8             | 880                     |      |         |              |                                                                                                                 |                                                                  |
| 9             | 879                     |      |         |              |                                                                                                                 |                                                                  |
| 10            | 878                     |      |         |              | Same as above; dry.                                                                                             |                                                                  |
| 11            | 877                     |      |         |              | Silty CLAY; dry; firm; non-plastic; 10YR6/6 brownish yellow.                                                    | Sample BKS103 collected 10.5-11.0' bgs.                          |
| 12            | 876                     |      |         |              | Same as above; interbedded with tan weathered limestone; dry.                                                   |                                                                  |
| 13            | 875                     |      |         |              |                                                                                                                 |                                                                  |
| 14            | 874                     |      |         |              |                                                                                                                 |                                                                  |
| 15            | 873                     |      |         |              | LIMESTONE, weathered; dry; blue-gray.                                                                           | Description from soil cuttings.                                  |
| 16            | 872                     |      |         |              |                                                                                                                 |                                                                  |
| 17            | 871                     |      |         |              |                                                                                                                 |                                                                  |
| 18            | 870                     |      |         |              |                                                                                                                 |                                                                  |
| 19            | 869                     |      |         |              |                                                                                                                 |                                                                  |
| 20            | 868                     |      |         |              | Bottom of Boring @ 18.5' bgs.                                                                                   | Soil colors from Munsell Soil Color Chart, 1992 Revised Edition. |



RCRA  
Facilities  
Investigation  
Fort Hood, Texas

U. S. Army Corp of Engineers  
Fort Worth District  
Fort Worth, Texas

## Boring FHBKG-SB102

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FHBKG : Background  
Start Date : 12/12/96  
End Date : 12/12/96  
Northing Coord. : 3446503.40 m  
Easting Coord. : 613980.64 m UTM 14 North  
Total Depth of Boring : 19.5 feet

Drilling Company : Terra-Mar  
Driller : Bill Christopher  
Designation of Drill : Mobile Drill B-59  
Type of Drill Rig : Hollow Stem Auger  
Geologist : Jeff DeVaughn  
Depth to Bedrock : 16.0 feet  
Depth Drilled Into Rock: 3.5 feet  
Borehole Diameter : 8 inches  
Sampling Equipment : 4.25" Augers  
: CME Sampler 5' long

| Depth in feet | Surf. Elev.<br>912.28ft | USCS | GRAPHIC | Water Levels | DESCRIPTION                                                                                                                             | REMARKS                                                          |
|---------------|-------------------------|------|---------|--------------|-----------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| 0             | 912                     |      |         |              | Topsoil. 0.0-0.4' bgs.                                                                                                                  |                                                                  |
| 1             | 911                     | CL   |         |              | Silty CLAY; weathered limestone fragments; dry; firm; non-plastic; mottled 10YR5/3 brown and 10YR8/2 very pale brown.                   |                                                                  |
| 2             | 910                     |      |         |              | Same as above; dry.                                                                                                                     |                                                                  |
| 3             | 909                     |      |         |              | LIMESTONE, weathered, tan; and Silty Clay interbeds; dry.                                                                               |                                                                  |
| 4             | 908                     | CL   |         |              |                                                                                                                                         |                                                                  |
| 5             | 907                     |      |         |              | Zones of limestone and highly indurated silty clay (weathered limestone?); shell fragments; roots; dry; very hard; 2.5Y8/2 pale yellow. |                                                                  |
| 6             | 906                     |      |         |              |                                                                                                                                         |                                                                  |
| 7             | 905                     |      |         |              | Same as above; dry.                                                                                                                     |                                                                  |
| 8             | 904                     |      |         |              |                                                                                                                                         |                                                                  |
| 9             | 903                     |      |         |              | Same as above; dry.                                                                                                                     |                                                                  |
| 10            | 902                     |      |         |              |                                                                                                                                         |                                                                  |
| 11            | 901                     | CL   |         |              | Same as above; dry.                                                                                                                     |                                                                  |
| 12            | 900                     |      |         |              |                                                                                                                                         |                                                                  |
| 13            | 899                     |      |         |              |                                                                                                                                         |                                                                  |
| 14            | 898                     |      |         |              |                                                                                                                                         |                                                                  |
| 15            | 897                     |      |         |              | Same as above; dry.                                                                                                                     |                                                                  |
| 16            | 896                     |      |         |              | LIMESTONE, weathered; dry; blue-gray.                                                                                                   |                                                                  |
| 17            | 895                     |      |         |              |                                                                                                                                         |                                                                  |
| 18            | 894                     | LS   |         |              | Same as above; dry.                                                                                                                     |                                                                  |
| 19            | 893                     |      |         |              | Same as above; dry.                                                                                                                     |                                                                  |
| 20            |                         |      |         |              | Bottom of Boring @ 19.5' bgs.                                                                                                           | Soil colors from Munsell Soil Color Chart, 1992 Revised Edition. |



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## Boring FHBKG-SB103

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FHBKG : Background  
Start Date : 12/10/96  
End Date : 12/10/96  
Northing Coord. : 3447405.80 m  
Easting Coord. : 606690.49 m UTM 14 North  
Total Depth of Boring : 17.0 feet

Drilling Company : Terra-Mar  
Driller : Bill Christopher  
Designation of Drill : Mobile Drill B-59  
Type of Drill Rig : Hollow Stem Auger  
Geologist : Jeff DeVaughn  
Depth to Bedrock : 15.0 feet  
Depth Drilled Into Rock: 2.0 feet  
Borehole Diameter : 8 inches  
Sampling Equipment : 4.25" Augers  
: CME Sampler 5' long

| Depth in feet | Surf. Elev.<br>795.26ft | USCS | GRAPHIC | Water Levels | DESCRIPTION                                                                                                                                                                                              | REMARKS                                                          |
|---------------|-------------------------|------|---------|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| 0             | 795                     |      |         |              | Topsoil. 0.0-0.2' bgs.; weathered tan limestone.                                                                                                                                                         | Sample BKSB104 collected 0.0-0.5' bgs.                           |
| 1             | 794                     |      |         |              | Interbedded Silty and pebbly CLAY; 40% coarse sand to pebble sized angular to subrounded fragments; dry; moderately plastic; thin layers of 10YR8/4 very pale brown and 10YR3/2 very dark grayish brown. | Description from soil cuttings.                                  |
| 2             | 793                     | CL   |         |              | Same as above; no pebbles; dry.                                                                                                                                                                          |                                                                  |
| 3             | 792                     |      |         |              | Same as above; weathered, tan limestone fragments; dry.                                                                                                                                                  | Sample BKSB105 collected 4.0-4.5' bgs.                           |
| 4             | 791                     | CL   |         |              |                                                                                                                                                                                                          |                                                                  |
| 5             | 790                     |      |         |              | Same as above; interbeds of limestone; dry.                                                                                                                                                              |                                                                  |
| 6             | 789                     |      |         |              | Same as above; dry.                                                                                                                                                                                      |                                                                  |
| 7             | 788                     |      |         |              |                                                                                                                                                                                                          |                                                                  |
| 8             | 787                     |      |         |              | Same as above; dry.                                                                                                                                                                                      |                                                                  |
| 9             | 786                     |      |         |              |                                                                                                                                                                                                          |                                                                  |
| 10            | 785                     | CL   |         |              | Same as above; dry.                                                                                                                                                                                      | Sample BKSB106 collected 9.0-9.5' bgs.                           |
| 11            | 784                     |      |         |              | Same as above; except more medium to coarse sand; dry; soft; non-plastic.                                                                                                                                |                                                                  |
| 12            | 783                     |      |         |              |                                                                                                                                                                                                          |                                                                  |
| 13            | 782                     |      |         |              | Same as above; dry.                                                                                                                                                                                      | Description from soil cuttings.                                  |
| 14            | 781                     | CL   |         |              |                                                                                                                                                                                                          |                                                                  |
| 15            | 780                     |      |         |              | Silty CLAY; weathered limestone fragments; damp; firm; moderately plastic; mottled 10YR8/2 very pale brown and 10YR6/4 light yellowish brown.                                                            | Sample BKSB107 collected 14.0-15.0' bgs.                         |
| 16            | 779                     | LS   |         |              | LIMESTONE, weathered; dry; blue-gray.                                                                                                                                                                    |                                                                  |
| 17            | 778                     |      |         |              | Bottom of Boring @ 17.0' bgs.                                                                                                                                                                            |                                                                  |
| 18            | 777                     |      |         |              |                                                                                                                                                                                                          |                                                                  |
| 19            | 776                     |      |         |              |                                                                                                                                                                                                          |                                                                  |
| 20            | 775                     |      |         |              |                                                                                                                                                                                                          | Soil colors from Munsell Soil Color Chart, 1992 Revised Edition. |



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## Boring FHBKG-SB104

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FHBKG : Background  
Start Date : 12/11/96  
End Date : 12/11/96  
Northing Coord. : 3447780.16 m  
Easting Coord. : 613523.75 m UTM 14 North  
Total Depth of Boring : 24.0 feet

Drilling Company : Terra-Mar  
Driller : Bill Christopher  
Designation of Drill : Mobile Drill B-59  
Type of Drill Rig : Hollow Stem Auger  
Geologist : Jeff DeVaughn  
Depth to Bedrock : 24.0 feet  
Depth Drilled Into Rock: NA  
Borehole Diameter : 8 inches  
Sampling Equipment : 4.25" Augers  
: CME Sampler 5' long

| Depth in feet | Surf. Elev. | USCS | GRAPHIC | Water Levels | DESCRIPTION                                                                                            | REMARKS                                                          |
|---------------|-------------|------|---------|--------------|--------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| 0             | 896         |      |         |              | Topsoil. 0.0-1.0' bgs.; weathered tan limestone.                                                       | Sample BKS108 collected 0.0-1.0' bgs.                            |
| 1             | 895         |      |         |              | Silty CLAY; trace organics; weathered limestone fragments; damp; soft; low plasticity; 2.5Y7/6 yellow. | Description from soil cuttings.                                  |
| 2             | 894         |      |         |              | Same as above.                                                                                         |                                                                  |
| 3             | 893         |      |         |              | Same as above; no organics; dry; 10YR7/8 yellow mottle.                                                | Sample BKS109 collected 4.0-5.0' bgs.                            |
| 4             | 892         |      |         |              | Same as above; slightly more silty; dry; hard; brittle.                                                | Description from soil cuttings.                                  |
| 5             | 891         | CL   |         |              |                                                                                                        | Description from soil cuttings. Hard drilling.                   |
| 6             | 890         |      |         |              |                                                                                                        | Sample BKS110 collected 11.0-11.5' bgs.                          |
| 7             | 889         |      |         |              |                                                                                                        | Geotechnical sample collected 12.0-13.0' bgs.                    |
| 8             | 888         |      |         |              |                                                                                                        | Description from soil cuttings.                                  |
| 9             | 887         | LS   |         |              | LIMESTONE, weathered; tan.<br>weathered limestone as above.                                            |                                                                  |
| 10            | 886         |      |         |              |                                                                                                        |                                                                  |
| 11            | 885         | CL   |         |              | Silty CLAY as above; dry.<br>Same as above; dry.                                                       |                                                                  |
| 12            | 884         |      |         |              |                                                                                                        |                                                                  |
| 13            | 883         | CL   |         |              | Silty CLAY and weathered LIMESTONE interbeds.                                                          |                                                                  |
| 14            | 882         |      |         |              |                                                                                                        |                                                                  |
| 15            | 881         | CL   |         |              |                                                                                                        |                                                                  |
| 16            | 880         |      |         |              |                                                                                                        |                                                                  |
| 17            | 879         | CL   |         |              |                                                                                                        |                                                                  |
| 18            | 878         | CL   |         |              | Silty CLAY as above; dry.<br>Silty CLAY and weathered LIMESTONE interbeds.                             | Sample BKS111 collected 18.0-18.5' bgs.                          |
| 19            | 877         |      |         |              |                                                                                                        |                                                                  |
| 20            | 876         |      |         |              |                                                                                                        |                                                                  |
| 21            | 875         | CL   |         |              |                                                                                                        |                                                                  |
| 22            | 874         |      |         |              |                                                                                                        |                                                                  |
| 23            | 873         |      |         |              | Same as above; dry.<br>Blue-gray weathered limestone fragments; dry.                                   | Description from soil cuttings.                                  |
| 24            | 872         | LS   |         |              | Bottom of Boring at 24.0' bgs.                                                                         | Soil colors from Munsell Soil Color Chart, 1992 Revised Edition. |
| 25            |             |      |         |              |                                                                                                        |                                                                  |



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Drilling Company : Terra-Mar  
Driller : Bill Christopher  
Designation of Drill : Mobile Drill B-59  
Type of Drill Rig : Hollow Stem Auger  
Geologist : Jeff DeVaughn  
Depth to Bedrock : 24.0 feet  
Depth Drilled Into Rock: NA  
Borehole Diameter : 8 inches  
Sampling Equipment : 4.25" Augers  
: CME Sampler 5' long

| Depth in feet | Surf. Elev. NS | USCS | GRAPHIC | Water Levels | DESCRIPTION                                                                                                                  | REMARKS                                                                                                         |
|---------------|----------------|------|---------|--------------|------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| 0 - 0         |                | GP   |         |              | GRAVEL (graded area).                                                                                                        |                                                                                                                 |
| 1 - -1        |                | CL   |         |              | Silty CLAY; weathered limestone fragments; dry; firm; non-plastic; 2.5Y6/4 light yellowish brown.<br><br>Same as above; dry. | Sample BKS112 collected 1.0-1.5' bgs.<br><br>Description from soil cuttings.                                    |
| 2 - -2        |                | CH   |         |              | CLAY, fat; dry; firm; highly plastic; mottled 2.5Y6/4 light yellowish brown and 10YR6/6 brownish yellow.                     | Sample BKS113 collected 4.0-5.0' bgs.                                                                           |
| 3 - -3        |                |      |         |              | Silty CLAY and LIMESTONE interbeds; dry; firm; 2.5Y6/4 light yellowish brown.                                                |                                                                                                                 |
| 4 - -4        |                |      |         |              | Same as above; dry.                                                                                                          |                                                                                                                 |
| 5 - -5        |                |      |         |              | Same as above; dry; moderately plastic.                                                                                      |                                                                                                                 |
| 6 - -6        |                |      |         |              | Same as above; dry.                                                                                                          |                                                                                                                 |
| 7 - -7        |                |      |         |              | Same as above; dry.                                                                                                          |                                                                                                                 |
| 8 - -8        |                |      |         |              | Same as above; dry.                                                                                                          |                                                                                                                 |
| 9 - -9        |                |      |         |              | Same as above; dry.                                                                                                          |                                                                                                                 |
| 10 - -10      |                | CL   |         |              | Same as above; dry.                                                                                                          |                                                                                                                 |
| 11 - -11      |                |      |         |              | Same as above; dry; moderately plastic.                                                                                      | Sample BKS114 collected 11.0-12.0' bgs.                                                                         |
| 12 - -12      |                |      |         |              | Same as above; dry.                                                                                                          |                                                                                                                 |
| 13 - -13      |                |      |         |              | Same as above; dry.                                                                                                          |                                                                                                                 |
| 14 - -14      |                |      |         |              | Same as above; more silt; dry; hard; brittle; non-plastic.                                                                   |                                                                                                                 |
| 15 - -15      |                | CL   |         |              | Same as above with weathered limestone interbeds.                                                                            | Sample BKS115 collected 15.0-15.5' bgs.                                                                         |
| 16 - -16      |                |      |         |              |                                                                                                                              |                                                                                                                 |
| 17 - -17      |                |      |         |              |                                                                                                                              |                                                                                                                 |
| 18 - -18      |                |      |         |              |                                                                                                                              |                                                                                                                 |
| 19 - -19      |                |      |         |              |                                                                                                                              |                                                                                                                 |
| 20 - -20      |                |      |         |              |                                                                                                                              |                                                                                                                 |
| 21 - -21      |                |      |         |              |                                                                                                                              |                                                                                                                 |
| 22 - -22      |                |      |         |              |                                                                                                                              |                                                                                                                 |
| 23 - -23      |                |      |         |              |                                                                                                                              |                                                                                                                 |
| 24 - -24      |                | LS   |         |              | Blue-gray weathered limestone; dry; hard drilling to 24.0'.<br><br>Bottom of Boring at 24.0' bgs.                            | Sample BKS116 collected 22.0-22.5' bgs.<br><br>Soil colors from Munsell Soil Color Chart, 1992 Revised Edition. |
| 25 -          |                |      |         |              |                                                                                                                              |                                                                                                                 |



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Drilling Company : Terra-Mar  
Driller : Bill Christopher  
Designation of Drill : Mobile Drill B-59  
Type of Drill Rig : Hollow Stem Auger  
Geologist : Jeff DeVaughn  
Depth to Bedrock : 25.5 feet  
Depth Drilled Into Rock: NA  
Borehole Diameter : 8 inches  
Sampling Equipment : 4.25" Augers  
: CME Sampler 5' long

| Depth in feet | Surf. Elev. NS | USCS | GRAPHIC | Water Levels | DESCRIPTION                                                                                                            | REMARKS                                                          |
|---------------|----------------|------|---------|--------------|------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| 0 - 0         |                |      |         |              | Silty CLAY; weathered limestone fragments; dry; firm; non-plastic; mottled 2.5Y7/6 yellow and 10YR6/6 brownish yellow. | Sample BKS117 collected 0.0-1.0' bgs.                            |
| 1 - 1         |                | CL   |         |              | Same as above; dry.                                                                                                    | Geotechnical sample collected 3.0-4.0' bgs.                      |
| 2 - 2         |                |      |         |              | Same as above with weathered limestone interbeds.                                                                      |                                                                  |
| 3 - 3         |                |      |         |              | Same as above with trace sand; dry.                                                                                    | Description from soil cuttings.                                  |
| 4 - 4         |                |      |         |              |                                                                                                                        |                                                                  |
| 5 - 5         |                |      |         |              |                                                                                                                        |                                                                  |
| 6 - 6         |                |      |         |              |                                                                                                                        |                                                                  |
| 7 - 7         |                |      |         |              |                                                                                                                        |                                                                  |
| 8 - 8         |                |      |         |              |                                                                                                                        |                                                                  |
| 9 - 9         |                |      |         |              |                                                                                                                        |                                                                  |
| 10 - 10       |                |      |         |              |                                                                                                                        |                                                                  |
| 11 - 11       |                | SM   |         |              |                                                                                                                        |                                                                  |
| 12 - 12       |                |      |         |              |                                                                                                                        |                                                                  |
| 13 - 13       |                |      |         |              |                                                                                                                        |                                                                  |
| 14 - 14       |                |      |         |              |                                                                                                                        |                                                                  |
| 15 - 15       |                |      |         |              |                                                                                                                        |                                                                  |
| 16 - 16       |                | SP   |         |              |                                                                                                                        |                                                                  |
| 17 - 17       |                |      |         |              |                                                                                                                        |                                                                  |
| 18 - 18       |                |      |         |              |                                                                                                                        |                                                                  |
| 19 - 19       |                |      |         |              |                                                                                                                        |                                                                  |
| 20 - 20       |                |      |         |              |                                                                                                                        |                                                                  |
| 21 - 21       |                | SW   |         |              |                                                                                                                        |                                                                  |
| 22 - 22       |                |      |         |              |                                                                                                                        |                                                                  |
| 23 - 23       |                |      |         |              |                                                                                                                        |                                                                  |
| 24 - 24       |                | LS   |         |              | LIMESTONE, weathered; dry; tan.                                                                                        | Description from soil cuttings.                                  |
| 25 - 25       |                |      |         |              |                                                                                                                        |                                                                  |
| 26 - 26       |                |      |         |              | Blue-gray weathered limestone; dry.<br>Bottom of Boring at 25.5' bgs.                                                  | Soil colors from Munsell Soil Color Chart, 1992 Revised Edition. |
| 27 - 27       |                |      |         |              |                                                                                                                        |                                                                  |
| 28 - 28       |                |      |         |              |                                                                                                                        |                                                                  |
| 29 - 29       |                |      |         |              |                                                                                                                        |                                                                  |
| 30 -          |                |      |         |              |                                                                                                                        |                                                                  |



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## Boring FHBKG-SB107

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|                         |                       |
|-------------------------|-----------------------|
| Drilling Company        | : Terra-Mar           |
| Driller                 | : Bill Christopher    |
| Designation of Drill    | : Mobile Drill B-59   |
| Type of Drill Rig       | : Hollow Stem Auger   |
| Geologist               | : Jeff DeVaughn       |
| Depth to Bedrock        | : 1.7 feet            |
| Depth Drilled Into Rock | : 4.3 feet            |
| Borehole Diameter       | : 8 inches            |
| Sampling Equipment      | : 4.25" Augers        |
|                         | : CME Sampler 5' long |

| Depth<br>in feet | Surf.<br>Elev.<br>NS | USCS | GRAPHIC | Water Levels | DESCRIPTION                                                                                                                         | REMARKS                                                          |
|------------------|----------------------|------|---------|--------------|-------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| 0 - 0            |                      |      |         |              | Silty CLAY; weathered limestone fragments; dry; hard; non-plastic; mottled 10YR6/8 brownish yellow and 10YR6/2 light brownish gray. | Sample BKS124 collected 0.0-1.0' bgs.                            |
| 1 - 1            |                      | CL   |         |              |                                                                                                                                     |                                                                  |
| 2 - 2            |                      |      |         |              | LIMESTONE, weathered, fossiliferous; Blue-Gray; 2.5Y6/1 gray.                                                                       |                                                                  |
| 3 - 3            |                      |      |         |              |                                                                                                                                     | Description from soil cuttings.                                  |
| 4 - 4            |                      | LS   |         |              | Same as above                                                                                                                       | Sample BKS125 collected 4.0-4.5' bgs.                            |
| 5 - 5            |                      |      |         |              |                                                                                                                                     | Description from soil cuttings.                                  |
| 6 - 6            |                      |      |         |              | Same as above                                                                                                                       | Sample BKS126 collected 5.5-6.0' bgs.                            |
| 7 - 7            |                      |      |         |              | Bottom of Boring at 6.0' bgs.                                                                                                       |                                                                  |
| 8 - 8            |                      |      |         |              |                                                                                                                                     | Soil colors from Munsell Soil Color Chart, 1992 Revised Edition. |
| 9 - 9            |                      |      |         |              |                                                                                                                                     |                                                                  |
| 10 -             |                      |      |         |              |                                                                                                                                     |                                                                  |



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**Boring FHBKG-SB108**  
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FHBKG : Background  
Start Date : 01/14/97  
End Date : 01/14/97  
Northing Coord. : Not  
Easting Coord. : Surveyed  
Total Depth of Boring : 17.0 feet

Drilling Company : Terra-Mar  
Driller : Bill Christopher  
Designation of Drill : Mobile Drill B-59  
Type of Drill Rig : Hollow Stem Auger  
Geologist : Jeff DeVaughn  
Depth to Bedrock : 15.0 feet  
Depth Drilled Into Rock: 2.0 feet  
Borehole Diameter : 8 inches  
Sampling Equipment : 4.25" Augers  
: CME Sampler 5' long

| Depth in feet | Surf. Elev. NS | USCS | GRAPHIC | Water Levels | DESCRIPTION                                                                                                     | REMARKS                                                          |
|---------------|----------------|------|---------|--------------|-----------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| 0 - 0         |                |      |         |              | Topsoil 0.0-0.4'<br>Silty CLAY; weathered limestone fragments; dry; firm; non-plastic; 10YR6/8 brownish yellow. | Sample BKS135 collected 0.0-1.0' bgs.                            |
| 1 - 1         |                |      |         |              | Same as above; dry.                                                                                             | Description from soil cuttings.                                  |
| 2 - 2         |                |      |         |              | Same as above; dry; mottled with 2.5Y7/3 pale yellow.                                                           | Sample BKS136 collected 5.0-5.5' bgs.                            |
| 3 - 3         |                |      |         |              | Same as above; dry.                                                                                             | Description from soil cuttings.                                  |
| 4 - 4         |                |      |         |              | Same as above; dry.                                                                                             | Sample BKS137 collected 9.0-9.5' bgs.                            |
| 5 - 5         |                |      |         |              | Same as above; dry.                                                                                             | Description from soil cuttings.                                  |
| 6 - 6         |                |      |         |              | Same as above; dry.                                                                                             | Sample BKS138 collected 14.0-14.5' bgs.                          |
| 7 - 7         |                |      |         |              | Same as above; dry.                                                                                             | Description from soil cuttings.                                  |
| 8 - 8         |                |      |         |              | Same as above; dry.                                                                                             | Sample BKS139 collected 16.5-17.0' bgs.                          |
| 9 - 9         |                |      |         |              | Same as above; dry.                                                                                             | Soil colors from Munsell Soil Color Chart, 1992 Revised Edition. |
| 10 - 10       |                |      |         |              | Bottom of Boring at 17.0' bgs.                                                                                  |                                                                  |
| 11 - 11       |                |      |         |              |                                                                                                                 |                                                                  |
| 12 - 12       |                |      |         |              |                                                                                                                 |                                                                  |
| 13 - 13       |                |      |         |              |                                                                                                                 |                                                                  |
| 14 - 14       |                |      |         |              |                                                                                                                 |                                                                  |
| 15 - 15       |                |      |         |              |                                                                                                                 |                                                                  |
| 16 - 16       |                |      |         |              |                                                                                                                 |                                                                  |
| 17 - 17       |                |      |         |              |                                                                                                                 |                                                                  |
| 18 - 18       |                |      |         |              |                                                                                                                 |                                                                  |
| 19 - 19       |                |      |         |              |                                                                                                                 |                                                                  |
| 20 -          |                |      |         |              |                                                                                                                 |                                                                  |



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|--------------------------|-----------------------|
| Drilling Company         | : Terra-Mar           |
| Driller                  | : Bill Christopher    |
| Designation of Drill     | : Mobile Drill B-59   |
| Type of Drill Rig        | : Hollow Stem Auger   |
| Geologist                | : Jeff DeVaughn       |
| Depth to Bedrock         | : Not Encountered     |
| Depth Drilled Into Rock: | NA                    |
| Borehole Diameter        | : 8 inches            |
| Sampling Equipment       | : 4.25" Augers        |
|                          | : CME Sampler 5' long |

| Depth in feet | Surf. Elev.<br>730.62ft | USCS | GRAPHIC | Water Levels | DESCRIPTION                                                                                                      | REMARKS                                                          |
|---------------|-------------------------|------|---------|--------------|------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| 0             |                         |      |         |              | Silty CLAY; trace roots; trace rock fragments <1cm, angular to subrounded; damp; highly plastic; 5YR2.5/1 black. | Sample BKS140 collected 0.0-1.0' bgs.                            |
| 1             | 730                     |      |         |              | Same as above; damp.                                                                                             |                                                                  |
| 2             | 729                     |      |         |              | Same as above; damp.                                                                                             | Description from soil cuttings.                                  |
| 3             | 728                     |      |         |              |                                                                                                                  | Sample BKS141 collected 4.0-5.0' bgs.                            |
| 4             | 727                     |      | CL      |              | Silty CLAY; trace weathered limestone fragments; dry; stiff; non-plastic; 7.5YR6/4 light brown.                  |                                                                  |
| 5             | 726                     |      |         |              | Some sand, fine, from 8-9' bgs.                                                                                  | Description from soil cuttings.                                  |
| 6             | 725                     |      |         |              | Same as above; dry.                                                                                              | Sample BKS142 collected 9.0-10.0' bgs.                           |
| 7             | 724                     |      |         |              |                                                                                                                  |                                                                  |
| 8             | 723                     |      |         |              |                                                                                                                  |                                                                  |
| 9             | 722                     |      |         |              |                                                                                                                  |                                                                  |
| 10            | 721                     |      |         |              |                                                                                                                  |                                                                  |
| 11            | 720                     |      |         |              |                                                                                                                  |                                                                  |
| 12            | 719                     |      |         |              |                                                                                                                  |                                                                  |
| 13            | 718                     |      |         |              |                                                                                                                  |                                                                  |
| 14            | 717                     |      | CL      |              | Same as above except rock fragments (mostly weathered limestone) up to 20% of total matrix.                      |                                                                  |
| 15            | 716                     |      |         |              | Same as above; dry.                                                                                              | Description from soil cuttings.                                  |
| 16            | 715                     |      |         |              |                                                                                                                  | Sample BKS143 collected 14.5-15.0' bgs.                          |
| 17            | 714                     |      |         |              |                                                                                                                  |                                                                  |
| 18            | 713                     |      |         |              |                                                                                                                  |                                                                  |
| 19            | 712                     |      |         |              |                                                                                                                  |                                                                  |
| 20            | 711                     |      |         |              |                                                                                                                  |                                                                  |
| 21            | 710                     |      |         |              |                                                                                                                  |                                                                  |
| 22            | 709                     |      |         |              |                                                                                                                  |                                                                  |
| 23            | 708                     |      | SM      |              | Silty SAND, fine to medium; moist; soft; moderately plastic; 7.5Y6/8 reddish yellow and 7.5 YR7/1 light gray.    | Water in hole, attempted sample, no recovery in gravel at 24'    |
| 24            | 707                     |      | GP      |              | Bottom of boring at 24.0' bgs. GRAVEL,angular;saturated                                                          | Soil colors from Munsell Soil Color Chart, 1992 Revised Edition. |
| 25            | 706                     |      |         |              |                                                                                                                  |                                                                  |



RCRA  
Facilities  
Investigation  
Fort Hood, Texas

U. S. Army Corp of Engineers  
Fort Worth District  
Fort Worth, Texas

## Boring FHBKG-SB110

(Page 1 of 1)

|                         |                       |
|-------------------------|-----------------------|
| Drilling Company        | : Terra-Mar           |
| Driller                 | : Bill Christopher    |
| Designation of Drill    | : Mobile Drill B-59   |
| Type of Drill Rig       | : Hollow Stem Auger   |
| Geologist               | : Jeff DeVaughn       |
| Depth to Bedrock        | : Not Encountered     |
| Depth Drilled Into Rock | : NA                  |
| Borehole Diameter       | : 8 inches            |
| Sampling Equipment      | : 4.25" Augers        |
|                         | : CME Sampler 5' long |

| Depth in feet | Surf. Elev.<br>729.66ft | USCS | GRAPHIC | Water Levels | DESCRIPTION                                                                                                                 | REMARKS                                                          |
|---------------|-------------------------|------|---------|--------------|-----------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| 0             | 729                     |      |         |              | SAND, fine to medium; some silt; damp; soft; non-plastic; 7.5YR5/6 strong brown.<br>Same as above; damp to moist.           | Sample BKS127 collected 0.0-1.0' bgs.                            |
| 1             | 728                     | SM   |         |              | Clayey SAND; damp; firm; moderately plastic; 2.5YR4/6 red.<br>Same as above; damp.                                          | Sample BKS128 collected 4.0-6.0' bgs.                            |
| 2             | 727                     |      |         |              | Same as above; damp.                                                                                                        |                                                                  |
| 3             | 726                     |      |         |              | Same as above; damp.                                                                                                        | Geotechnical sample collected 8.0-9.0' bgs.                      |
| 4             | 725                     |      |         |              | Same as above; slightly less clay; dry.                                                                                     | Sample BKS129 collected 10.0-11.0' bgs.                          |
| 5             | 724                     |      |         |              | Same as above; dry.                                                                                                         |                                                                  |
| 6             | 723                     |      |         |              | Same as above; less clay; dry; color change 5YR5/6 yellowish red.                                                           | Sample BKS130 collected 15.0-16.0' bgs.                          |
| 7             | 722                     |      |         |              | Same as above; dry.                                                                                                         |                                                                  |
| 8             | 721                     |      |         |              | Same as above; dry.                                                                                                         |                                                                  |
| 9             | 720                     |      |         |              | Same as above; dry.                                                                                                         |                                                                  |
| 10            | 719                     | SC   |         |              | Same as above; dry.                                                                                                         |                                                                  |
| 11            | 718                     |      |         |              | Same as above; dry.                                                                                                         |                                                                  |
| 12            | 717                     |      |         |              | Same as above; dry.                                                                                                         |                                                                  |
| 13            | 716                     |      |         |              | Same as above; dry.                                                                                                         |                                                                  |
| 14            | 715                     |      |         |              | Same as above; more clay; dry.                                                                                              |                                                                  |
| 15            | 714                     |      |         |              | Silty CLAY; trace sand; trace tan weathered limestone fragments; dry; hard; 7.5YR6/6 reddish yellow.<br>Same as above; dry. | Sample BKS131 collected 20.0-21.0' bgs.                          |
| 16            | 713                     |      |         |              | Same as above; dry.                                                                                                         |                                                                  |
| 17            | 712                     |      |         |              | Same as above; dry.                                                                                                         |                                                                  |
| 18            | 711                     |      |         |              | Same as above; dry.                                                                                                         |                                                                  |
| 19            | 710                     |      |         |              | Same as above; dry.                                                                                                         |                                                                  |
| 20            | 709                     | CL   |         |              | Same as above; dry.                                                                                                         | Sample BKS132 collected 25.0-26.0' bgs.                          |
| 21            | 708                     |      |         |              | Same as above; dry.                                                                                                         |                                                                  |
| 22            | 707                     |      |         |              | Same as above; dry.                                                                                                         |                                                                  |
| 23            | 706                     |      |         |              | Same as above; dry.                                                                                                         |                                                                  |
| 24            | 705                     |      |         |              | Same as above; with more silt; moist; softer.                                                                               | Sample BKS133 collected 30.0-31.0' bgs.                          |
| 25            | 704                     |      |         |              | Same as above; except very silty; damp; soft.                                                                               |                                                                  |
| 26            | 703                     |      |         |              |                                                                                                                             |                                                                  |
| 27            | 702                     |      |         |              |                                                                                                                             |                                                                  |
| 28            | 701                     |      |         |              |                                                                                                                             |                                                                  |
| 29            | 700                     |      |         |              |                                                                                                                             |                                                                  |
| 30            | 699                     |      |         |              |                                                                                                                             |                                                                  |
| 31            | 698                     |      |         |              |                                                                                                                             |                                                                  |
| 32            | 697                     |      |         |              |                                                                                                                             |                                                                  |
| 33            | 696                     | SM   |         |              | Silty SAND, fine; trace gravel and coarse sand at bottom; saturated; non-plastic; 7.5Y6/6 reddish yellow.                   | Sample BKS134 collected 34.0-34.5' bgs.                          |
| 34            | 695                     | GW   |         |              | SAND, coarse, and GRAVEL, poorly sorted, angular to round; saturated; 1.5 water in hole.                                    |                                                                  |
| 35            | 694                     |      |         |              | Bottom of boring at 34.5' bgs.                                                                                              |                                                                  |
| 36            | 693                     |      |         |              |                                                                                                                             |                                                                  |
| 37            | 692                     |      |         |              |                                                                                                                             |                                                                  |
| 38            | 691                     |      |         |              |                                                                                                                             |                                                                  |
| 39            | 690                     |      |         |              |                                                                                                                             |                                                                  |
| 40            |                         |      |         |              |                                                                                                                             | Soil colors from Munsell Soil Color Chart, 1992 Revised Edition. |

**APPENDIX E**

**Statistical Calculations**

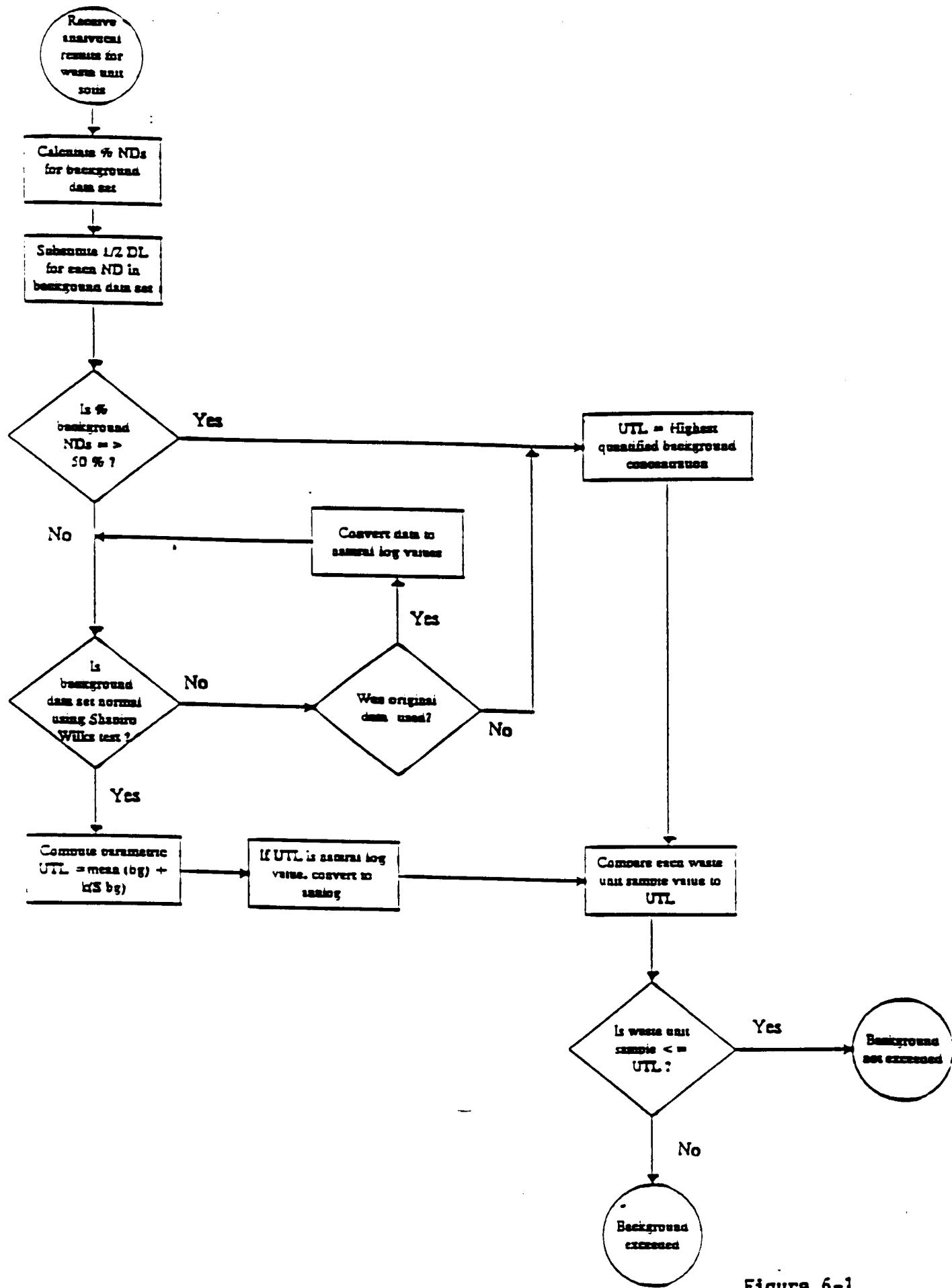
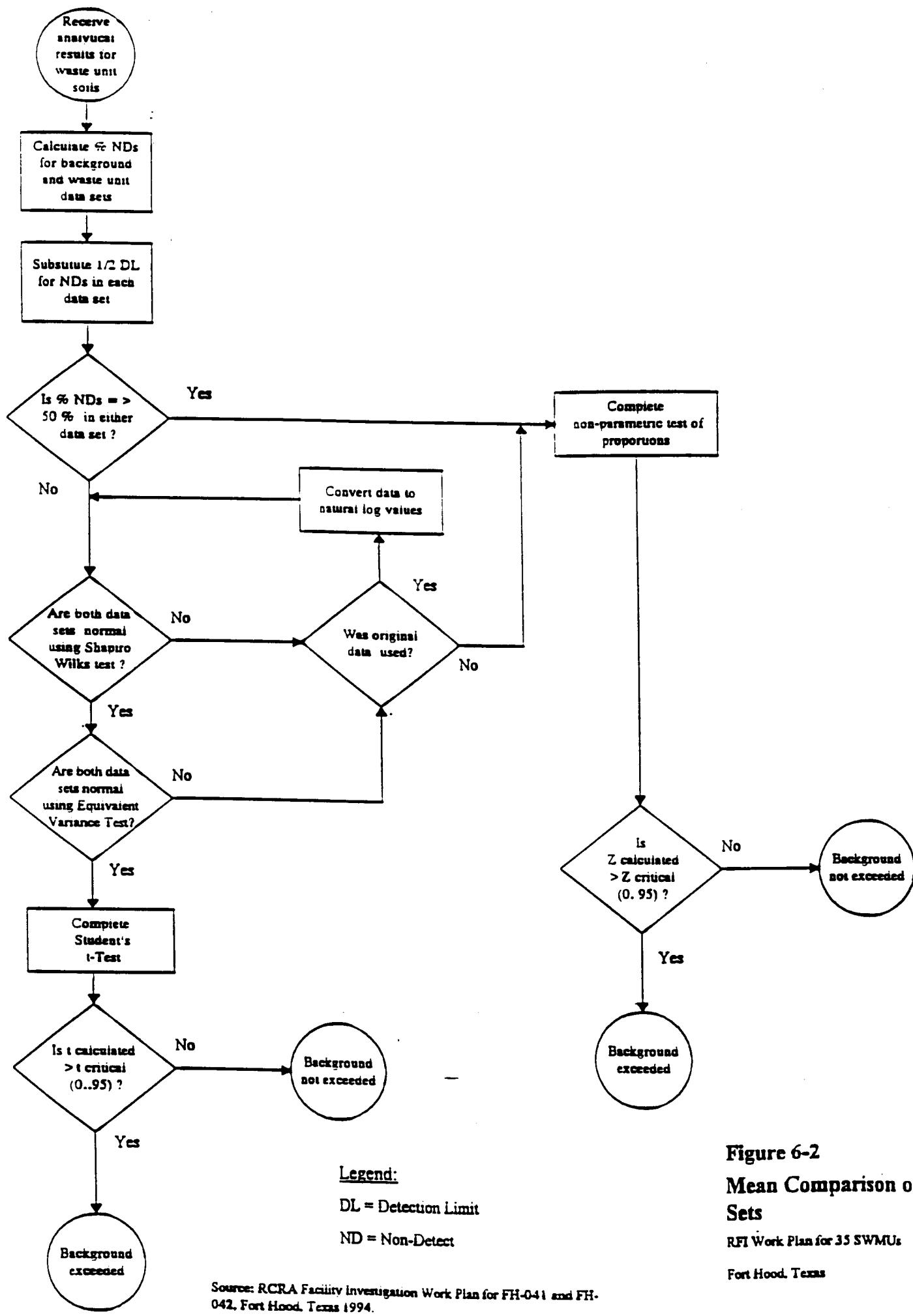


Figure 6-1  
95% Upper Tolerance Limit  
RFI Work Plan for 35 SW  
Fort Hood, Texas



**Figure 6-2**  
**Mean Comparison of Sets**  
 RFI Work Plan for 35 SWMUs  
 Fort Hood, Texas

**95% UTLs**

| Soil Background 95% UTLs NO DUPLICATES |            |            |            |            |      |            |
|----------------------------------------|------------|------------|------------|------------|------|------------|
| smp_id                                 | Mercury    |            | Arsenic    | Barium     |      |            |
|                                        | Result (x) | Qual       | Result (x) | Result     | Qual | Ln(x)      |
| BKSB101                                | 0.04       | U          | 3          | 21.3       | J    | 3.05870707 |
| BKSB102                                | 0.04       | U          | 2          | 8          | J    | 2.07944154 |
| BKSB103                                | 0.04       | U          | 9.1        | 14.7       | J    | 2.68784749 |
| BKSB105                                | 0.04       | U          | 4.3        | 23.4       | J    | 3.15273602 |
| BKSB106                                | 0.04       | U          | 4.4        | 43.7       | J    | 3.7773481  |
| BKSB107                                | 0.04       | U          |            |            |      |            |
| BKSB109                                | 0.04       | U          | 3.5        | 155        | J    | 5.04342512 |
| BKSB110                                | 0.04       | U          | 4.8        | 24.1       | J    | 3.18221184 |
| BKSB111                                | 0.04       | U          | 5.2        | 7.2        | J    | 1.97408103 |
| BKSB113                                | 0.04       | U          | 5.7        | 20.5       | J    | 3.02042489 |
| BKSB114                                | 0.04       | U          | 5.2        | 25.2       | J    | 3.22684399 |
| BKSB115                                | 0.04       | U          | 5.3        | 10.6       | J    | 2.360854   |
| BKSB116                                | 0.04       | U          | 11.6       | 4.9        | J    | 1.58923521 |
| BKSB118                                | 0.04       | U          | 2.6        | 4.4        | J    | 1.48160454 |
| BKSB119                                | 0.04       | U          | 0.66       | 3          |      | 1.09861229 |
| BKSB120                                | 0.04       | U          | 0.44       | 2          |      | 0.69314718 |
| BKSB122                                | 0.04       | U          | 3.2        | 6.1        |      | 1.80828877 |
| BKSB123                                | 0.04       | U          | 3.8        | 5.5        |      | 1.70474809 |
| BKSB125                                | 0.04       | U          | 3.2        | 18.1       |      | 2.89591194 |
| BKSB126                                | 0.04       | U          | 2.5        | 5.4        |      | 1.68639895 |
| BKSB128                                | 0.04       |            | 3.6        | 36.3       |      | 3.59181774 |
| BKSB129                                | 0.04       | U          | 2.6        | 26.3       |      | 3.26956894 |
| BKSB130                                | 0.04       | U          | 1          | 8.1        |      | 2.09186406 |
| BKSB131                                | 0.04       | U          | 5.3        | 65.9       |      | 4.18813844 |
| BKSB132                                | 0.04       | U          | 4.2        | 41.7       |      | 3.73050113 |
| BKSB133                                | 0.04       | U          | 3.2        | 68.6       |      | 4.22829253 |
| BKSB134                                | 0.04       | U          | 2.9        | 20.1       |      | 3.00071982 |
| BKSB136                                | 0.04       | U          | 4.3        | 14.8       | J    | 2.69462718 |
| BKSB137                                | 0.04       | U          | 8.2        | 7.8        | J    | 2.05412373 |
| BKSB138                                | 0.04       | U          | 9.2        | 12.2       | J    | 2.50143595 |
| BKSB139                                | 0.04       | U          | 7.6        | 7.3        | J    | 1.98787435 |
| BKSB141                                | 0.04       | U          | 5.6        | 127        | J    | 4.84418709 |
| BKSB142                                | 0.04       | U          | 3.8        | 63         | J    | 4.14313473 |
| BKSB143                                | 0.04       | U          | 3.8        | 39.3       | J    | 3.67122452 |
| BKSB144                                | 0.04       | U          | 3.7        | 36.1       | J    | 3.58629287 |
| BKSB104                                | 0.04       | U          | 6.2        | 28.2       | J    | 3.33932198 |
| BKSB108                                | 0.04       | U          | 6          | 72.4       | J    | 4.2822063  |
| BKSB112                                | 0.04       | U          | 1.6        | 6.6        | J    | 1.88706965 |
| BKSB117                                | 0.04       | U          | 4.4        | 27.9       | J    | 3.32862669 |
| BKSB121                                | 0.04       | U          | 4.1        | 24         |      | 3.17805383 |
| BKSB124                                | 0.04       | U          | 6          | 19.3       |      | 2.9601051  |
| BKSB127                                | 0.04       | U          | 1.9        | 18.8       |      | 2.93385687 |
| BKSB135                                | 0.04       | U          | 2.7        | 15.4       | J    | 2.73436751 |
| BKSB140                                | 0.04       | U          | 4.8        | 108        | J    | 4.68213123 |
| %nondetects=                           | 0.04       | 0.95744681 |            |            | 0    |            |
| Distribution                           | D          |            | N          |            |      | L          |
| Mean                                   | 0.04       |            | 4.35348837 | 30.1906977 |      | 2.91700954 |
| std dev                                | 0          |            | 2.29920368 | 33.4734423 |      | 1.01859487 |
| n                                      | 44         |            | 43         | 43         |      | 43         |
| K                                      | 2.097      |            | 2.102      | 2.102      |      | 2.102      |
| UTL                                    | 0.04       |            | 9.1864145  | 100.55187  |      | 5.058096   |
| UTL(Ln)=exp(mean + K(std d)            |            |            |            |            |      | 157.29074  |

## 95% UTLS

| Soil Background |            |            |                |            |            |      |            |
|-----------------|------------|------------|----------------|------------|------------|------|------------|
| smp_id          | Cadmium    |            |                |            | Chromium   |      |            |
|                 | Result (x) | Qual       | 1/2 nondetects | Ln(x)      | Result (x) | Qual | Ln(x)      |
| BKSB101         | 0.12       |            | 0.12           | -2.1202635 | 5.1        | J    | 1.62924054 |
| BKSB102         | 0.05       |            | 0.05           | -2.9957323 | 10.3       | J    | 2.3321439  |
| BKSB103         | 0.05       | U          | 0.025          | -3.6888795 | 10.1       | J    | 2.31253542 |
| BKSB105         | 0.11       |            | 0.11           | -2.2072749 | 4          | J    | 1.38629436 |
| BKSB106         | 0.16       |            | 0.16           | -1.8325815 | 7.6        | J    | 2.02814825 |
| BKSB107         | 0.35       |            | 0.35           | -1.0498221 | 5.1        | J    | 1.62924054 |
| BKSB109         | 0.07       |            | 0.07           | -2.65926   | 6.5        | J    | 1.87180218 |
| BKSB110         | 0.06       |            | 0.06           | -2.8134107 | 16.6       | J    | 2.8094027  |
| BKSB111         | 0.05       |            | 0.05           | -2.9957323 | 6.2        | J    | 1.82454929 |
| BKSB113         | 0.07       |            | 0.07           | -2.65926   | 8.9        | J    | 2.18605128 |
| BKSB114         | 0.05       | U          | 0.025          | -3.6888795 | 20.3       | J    | 3.01062089 |
| BKSB115         | 0.06       |            | 0.06           | -2.8134107 | 7.3        | J    | 1.98787435 |
| BKSB116         | 0.2        |            | 0.2            | -1.6094379 | 2.7        | J    | 0.99325177 |
| BKSB118         | 0.19       |            | 0.19           | -1.6607312 | 2.2        | J    | 0.78845736 |
| BKSB119         | 0.06       |            | 0.06           | -2.8134107 | 2.1        |      | 0.74193734 |
| BKSB120         | 0.04       | U          | 0.02           | -3.912023  | 0.93       |      | -0.0725707 |
| BKSB122         | 0.06       |            | 0.06           | -2.8134107 | 4.9        |      | 1.58923521 |
| BKSB123         | 0.08       |            | 0.08           | -2.5257286 | 4.3        |      | 1.45861502 |
| BKSB125         | 0.11       |            | 0.11           | -2.2072749 | 5.1        |      | 1.62924054 |
| BKSB126         | 0.06       |            | 0.06           | -2.8134107 | 5.5        |      | 1.70474809 |
| BKSB128         | 0.05       | U          | 0.025          | -3.6888795 | 8.5        |      | 2.14006616 |
| BKSB129         | 0.04       | U          | 0.02           | -3.912023  | 4.6        |      | 1.5260563  |
| BKSB130         | 0.07       |            | 0.07           | -2.65926   | 1.8        |      | 0.58778666 |
| BKSB131         | 0.15       |            | 0.15           | -1.89712   | 7.7        |      | 2.04122033 |
| BKSB132         | 0.04       | U          | 0.02           | -3.912023  | 5.9        |      | 1.77495235 |
| BKSB133         | 0.11       |            | 0.11           | -2.2072749 | 4.9        |      | 1.58923521 |
| BKSB134         | 0.08       |            | 0.08           | -2.5257286 | 1.2        |      | 0.18232156 |
| BKSB136         | 0.2        | J          | 0.2            | -1.6094379 | 8.3        |      | 2.11625551 |
| BKSB137         | 0.18       | J          | 0.18           | -1.7147984 | 8.1        |      | 2.09186406 |
| BKSB138         | 0.21       | J          | 0.21           | -1.5606477 | 11.1       |      | 2.40694511 |
| BKSB139         | 0.2        | J          | 0.2            | -1.6094379 | 8.4        |      | 2.12823171 |
| BKSB141         | 0.45       | J          | 0.45           | -0.7985077 | 23.6       |      | 3.16124671 |
| BKSB142         | 0.29       | J          | 0.29           | -1.2378744 | 8.4        |      | 2.12823171 |
| BKSB143         | 0.27       | J          | 0.27           | -1.3093333 | 12.2       |      | 2.50143595 |
| BKSB144         | 0.2        | J          | 0.2            | -1.6094379 | 6.5        |      | 1.87180218 |
| BKSB104         | 0.15       |            | 0.15           | -1.89712   | 3.1        | J    | 1.13140211 |
| BKSB108         | 0.2        |            | 0.2            | -1.6094379 | 12.9       | J    | 2.55722731 |
| BKSB112         | 0.04       | U          | 0.02           | -3.912023  | 4          | J    | 1.38629436 |
| BKSB117         | 0.18       |            | 0.18           | -1.7147984 | 5.7        | J    | 1.74046617 |
| BKSB121         | 0.18       |            | 0.18           | -1.7147984 | 6.3        |      | 1.84054963 |
| BKSB124         | 0.11       |            | 0.11           | -2.2072749 | 7.2        |      | 1.97408103 |
| BKSB127         | 0.04       | U          | 0.02           | -3.912023  | 3.7        |      | 1.30833282 |
| BKSB135         | 0.17       | J          | 0.17           | -1.7719568 | 6.1        |      | 1.80828877 |
| BKSB140         | 0.79       | J          | 0.79           | -0.2357223 | 16.1       |      | 2.77881927 |
| %nondetects=    |            | 0.19148936 |                |            |            |      | 0          |
| Distribution    |            |            | L              |            |            |      | L          |
| Mean            | 0.14545455 |            |                | -2.343338  | 7.31886364 |      | 1.78668026 |
| std dev         | 0.13475999 |            |                | 0.92656476 | 4.7817999  |      | 0.68062712 |
| n               | 44         |            |                | 44         | 44         |      | 44         |
| K               | 2.097      |            |                | 2.097      | 2.097      |      | 2.097      |
| UTL             | 0.4280462  |            |                | -0.400332  | 17.346298  |      | 3.2139553  |
| UTL(Ln)=exp(me) |            |            |                | 0.6700977  |            |      | 24.87729   |

**95% UTLs**

| Soil Background |            |      |            |            |        |            |      |
|-----------------|------------|------|------------|------------|--------|------------|------|
| smp_id          | Lead       |      | Selenium   |            | Silver |            |      |
|                 | Result (x) | Qual | Ln(x)      | Result (x) | Qual   | Result (x) | Qual |
| BKSB101         | 6 J        |      | 1.79175947 | 0.37 U     |        | 0.24 U     |      |
| BKSB102         | 5 J        |      | 1.60943791 | 0.36 U     |        | 0.23 U     |      |
| BKSB103         | 9.5 J      |      | 2.2512918  | 0.38 U     |        | 0.24 U     |      |
| BKSB105         | 3.9 J      |      | 1.36097655 | 0.33 U     |        | 0.21 U     |      |
| BKSB106         | 5 J        |      | 1.60943791 | 0.33 U     |        | 0.21 U     |      |
| BKSB107         | 6.1 J      |      | 1.80828877 | 0.36 U     |        | 0.23 U     |      |
| BKSB109         | 3.2 J      |      | 1.16315081 | 0.34 U     |        | 0.22 U     |      |
| BKSB110         | 7.8 J      |      | 2.05412373 | 0.36 U     |        | 0.23 U     |      |
| BKSB111         | 5.3 J      |      | 1.66770682 | 0.35 U     |        | 0.22 U     |      |
| BKSB113         | 6 J        |      | 1.79175947 | 0.36 U     |        | 0.23 U     |      |
| BKSB114         | 7.7 J      |      | 2.04122033 | 0.38 U     |        | 0.24 U     |      |
| BKSB115         | 5.1 J      |      | 1.62924054 | 0.32 U     |        | 0.2 U      |      |
| BKSB116         | 5.6 J      |      | 1.7227666  | 0.33 U     |        | 0.21 U     |      |
| BKSB118         | 3.7 J      |      | 1.30833282 | 0.34 U     |        | 0.21 U     |      |
| BKSB119         | 1.3 J      |      | 0.26236426 | 0.33 U     |        | 0.21 U     |      |
| BKSB120         | 0.72 J     |      | -0.3285041 | 0.32 U     |        | 0.2 U      |      |
| BKSB122         | 4.1 J      |      | 1.41098697 | 0.33 U     |        | 0.21 U     |      |
| BKSB123         | 3.8 J      |      | 1.33500107 | 0.33 U     |        | 0.21 U     |      |
| BKSB125         | 1.7 J      |      | 0.53062825 | 0.36       |        | 0.2 U      |      |
| BKSB126         | 1.5 J      |      | 0.40546511 | 0.44       |        | 0.21 U     |      |
| BKSB128         | 7.5 J      |      | 2.01490302 | 0.35 U     |        | 0.22 U     |      |
| BKSB129         | 4.1 J      |      | 1.41098697 | 0.33 U     |        | 0.21 U     |      |
| BKSB130         | 3.1 J      |      | 1.13140211 | 0.32 U     |        | 0.2 U      |      |
| BKSB131         | 10.1 J     |      | 2.31253542 | 0.34 U     |        | 0.22 U     |      |
| BKSB132         | 7.8 J      |      | 2.05412373 | 0.34 U     |        | 0.21 U     |      |
| BKSB133         | 6.3 J      |      | 1.84054963 | 0.35 U     |        | 0.22 U     |      |
| BKSB134         | 2.3 J      |      | 0.83290912 | 0.33 U     |        | 0.21 U     |      |
| BKSB136         | 3 J        |      | 1.09861229 | 0.32 R     |        | 0.22 U     |      |
| BKSB137         | 2.3 J      |      | 0.83290912 | 0.31 R     |        | 0.21 U     |      |
| BKSB138         | 4.1 J      |      | 1.41098697 | 0.32 R     |        | 0.22 U     |      |
| BKSB139         | 3.6 J      |      | 1.28093385 | 0.31 R     |        | 0.21 U     |      |
| BKSB141         | 12.1 J     |      | 2.49320545 | 1.8 R      |        | 0.25 U     |      |
| BKSB142         | 5 J        |      | 1.60943791 | 1.9 R      |        | 0.25 U     |      |
| BKSB143         | 6.6 J      |      | 1.88706965 | 0.35 R     |        | 0.24 U     |      |
| BKSB144         | 4 J        |      | 1.38629436 | 0.31 R     |        | 0.21 U     |      |
| BKSB104         | 5.3 J      |      | 1.66770682 | 0.32 U     |        | 0.2 U      |      |
| BKSB108         | 9.8 J      |      | 2.28238239 | 0.37 U     |        | 0.23 U     |      |
| BKSB112         | 1.5 J      |      | 0.40546511 | 0.32 U     |        | 0.2 U      |      |
| BKSB117         | 8.3 J      |      | 2.11625551 | 0.33 U     |        | 0.21 U     |      |
| BKSB121         | 10.2 J     |      | 2.32238772 | 0.34 U     |        | 0.22 U     |      |
| BKSB124         | 4.5 J      |      | 1.5040774  | 0.34 U     |        | 0.21 U     |      |
| BKSB127         | 3.8 J      |      | 1.33500107 | 0.33 U     |        | 0.21 U     |      |
| BKSB135         | 2.5 J      |      | 0.91629073 | 1.5 R      |        | 0.21 U     |      |
| BKSB140         | 33.2 J     |      | 3.50254988 | 0.35 R     |        | 0.24 U     |      |
| % nondetects =  |            | 0    |            |            |        |            |      |
| Distribution    |            | L    | D          |            | D      |            |      |
| Mean            | 5.77318182 |      | 1.52441844 | — 0.345    |        | 0.21795455 |      |
| std dev         | 4.99838289 |      | 0.67810106 | 0.02427744 |        | 0.01390659 |      |
| n               | 44         |      | 44         |            |        |            |      |
| K               | 2.097      |      | 2.097      |            |        |            |      |
| UTL             | 16.254791  |      | 2.9463964  |            |        |            |      |
| UTL(ln)=exp(me) |            |      | 19.037227  |            |        |            |      |

Shapiro Wilk for Barium

|                                         | Bkgd Conc<br>(xi) (mg/kg) | Ordered<br>Conc. x(i) | Reverse Ordered<br>x(n-i+1) | Difference x(n-<br>i+1)-x(i) | a(n-i+1)   | b(i)       |
|-----------------------------------------|---------------------------|-----------------------|-----------------------------|------------------------------|------------|------------|
| BKSB101                                 | 21.3                      | 2                     | 155                         | 153                          | 0.3894     | 59.5782    |
| BKSB102                                 | 8                         | 3                     | 127                         | 124                          | 0.2684     | 33.2816    |
| BKSB103                                 | 14.7                      | 4.4                   | 108                         | 103.6                        | 0.2334     | 24.18024   |
| BKSB105                                 | 23.4                      | 4.9                   | 72.4                        | 67.5                         | 0.2078     | 14.0265    |
| BKSB106                                 | 43.7                      | 5.4                   | 68.6                        | 63.2                         | 0.1871     | 11.82472   |
| BKSB107                                 |                           | 5.5                   | 65.9                        | 60.4                         | 0.1695     | 10.2378    |
| BKSB109                                 | 155                       | 6.1                   | 63                          | 56.9                         | 0.1539     | 8.75691    |
| BKSB110                                 | 24.1                      | 6.6                   | 43.7                        | 37.1                         | 0.1398     | 5.18658    |
| BKSB111                                 | 7.2                       | 7.2                   | 41.7                        | 34.5                         | 0.1269     | 4.37805    |
| BKSB113                                 | 20.5                      | 7.3                   | 39.3                        | 32                           | 0.1149     | 3.6768     |
| BKSB114                                 | 25.2                      | 7.8                   | 36.3                        | 28.5                         | 0.1035     | 2.94975    |
| BKSB115                                 | 10.6                      | 8                     | 36.1                        | 28.1                         | 0.0927     | 2.60487    |
| BKSB116                                 | 4.9                       | 8.1                   | 28.2                        | 20.1                         | 0.0824     | 1.65624    |
| BKSB118                                 | 4.4                       | 10.6                  | 27.9                        | 17.3                         | 0.0724     | 1.25252    |
| BKSB119                                 | 3                         | 12.2                  | 26.3                        | 14.1                         | 0.0628     | 0.88548    |
| BKSB120                                 | 2                         | 14.7                  | 25.2                        | 10.5                         | 0.0534     | 0.5607     |
| BKSB122                                 | 6.1                       | 14.8                  | 24.1                        | 9.3                          | 0.0442     | 0.41106    |
| BKSB123                                 | 5.5                       | 15.4                  | 24                          | 8.6                          | 0.0352     | 0.30272    |
| BKSB125                                 | 18.1                      | 18.1                  | 23.4                        | 5.3                          | 0.0263     | 0.13939    |
| BKSB126                                 | 5.4                       | 18.8                  | 21.3                        | 2.5                          | 0.0175     | 0.04375    |
| BKSB128                                 | 36.3                      | 19.3                  | 20.5                        | 1.2                          | 0.0087     | 0.01044    |
| BKSB129                                 | 26.3                      | 20.1                  | 20.1                        | 0                            | 0          | 0          |
| BKSB130                                 | 8.1                       | 20.5                  | 19.3                        | -1.2                         |            | 0          |
| BKSB131                                 | 65.9                      | 21.3                  | 18.8                        | -2.5                         |            | 0          |
| BKSB132                                 | 41.7                      | 23.4                  | 18.1                        | -5.3                         |            |            |
| BKSB133                                 | 68.6                      | 24                    | 15.4                        | -8.6                         | sum Bi=    | 185.94432  |
| BKSB134                                 | 20.1                      | 24.1                  | 14.8                        | -9.3                         |            |            |
| BKSB136                                 | 14.8                      | 25.2                  | 14.7                        | -10.5                        | W(0.05,43) | 0.943      |
| BKSB137                                 | 7.8                       | 26.3                  | 12.2                        | -14.1                        | W=         | 0.73470973 |
| BKSB138                                 | 12.2                      | 27.9                  | 10.6                        | -17.3                        |            |            |
| BKSB139                                 | 7.3                       | 28.2                  | 8.1                         | -20.1                        |            |            |
| BKSB141                                 | 127                       | 36.1                  | 8                           | -28.1                        |            |            |
| BKSB142                                 | 63                        | 36.3                  | 7.8                         | -28.5                        |            |            |
| BKSB143                                 | 39.3                      | 39.3                  | 7.3                         | -32                          |            |            |
| BKSB144                                 | 36.1                      | 41.7                  | 7.2                         | -34.5                        |            |            |
| BKSB104                                 | 28.2                      | 43.7                  | 6.6                         | -37.1                        |            |            |
| BKSB108                                 | 72.4                      | 63                    | 6.1                         | -56.9                        |            |            |
| BKSB112                                 | 6.6                       | 65.9                  | 5.5                         | -60.4                        |            |            |
| BKSB117                                 | 27.9                      | 68.6                  | 5.4                         | -63.2                        |            |            |
| BKSB121                                 | 24                        | 72.4                  | 4.9                         | -67.5                        |            |            |
| BKSB124                                 | 19.3                      | 108                   | 4.4                         | -103.6                       |            |            |
| BKSB127                                 | 18.8                      | 127                   | 3                           | -124                         |            |            |
| BKSB135                                 | 15.4                      | 155                   | 2                           | -153                         |            |            |
| BKSB140                                 | 108                       |                       |                             | 0                            |            |            |
| Sum of xi                               | 1298.2                    |                       |                             |                              |            |            |
| Mean                                    | 30.19069767               |                       |                             |                              |            |            |
| n=                                      | 43                        |                       |                             |                              |            |            |
| sum of xi^2                             | 86253.36                  |                       |                             |                              |            |            |
| 1/n=                                    | 0.023255814               |                       |                             |                              |            |            |
| xi=(sum xi)^2                           | 1685323.24                |                       |                             |                              |            |            |
| d=                                      | 47059.79628               |                       |                             |                              |            |            |
| W=                                      | 0.734709728               |                       |                             |                              |            |            |
| W(0.05,43)=                             | 0.943                     |                       |                             |                              |            |            |
| W<W(0.5,43), distribution is not Normal |                           |                       |                             |                              |            |            |

### Shapiro Wilk for Barium

|              | In of ordered Conc. x(i) |                                        | In of Reverse Order x(n-i+1) | Difference x(n-i+1)-x(i) | a(n-i+1)   | b(i)        |
|--------------|--------------------------|----------------------------------------|------------------------------|--------------------------|------------|-------------|
|              | 0.693147181              | 0.48045301                             | 5.043425117                  | 4.35027794               | 0.3894     | 1.693998228 |
|              | 1.098612289              | 1.20694896                             | 4.844187086                  | 3.7455748                | 0.2684     | 1.005312276 |
|              | 1.481604541              | 2.19515202                             | 4.682131227                  | 3.20052669               | 0.2334     | 0.747002929 |
|              | 1.589235205              | 2.52566854                             | 4.282206299                  | 2.69297109               | 0.2078     | 0.559599393 |
|              | 1.686398954              | 2.84394143                             | 4.228292535                  | 2.54189358               | 0.1871     | 0.475588289 |
|              | 1.704748092              | 2.90616606                             | 4.188138442                  | 2.48339035               | 0.1695     | 0.420934664 |
|              | 1.808288771              | 3.26990828                             | 4.143134726                  | 2.33484596               | 0.1539     | 0.359332793 |
|              | 1.887069649              | 3.56103186                             | 3.777348102                  | 1.89027845               | 0.1398     | 0.264260928 |
|              | 1.974081026              | 3.8969959                              | 3.730501129                  | 1.7564201                | 0.1269     | 0.222889711 |
|              | 1.987874348              | 3.95164442                             | 3.671224519                  | 1.68335017               | 0.1149     | 0.193416935 |
|              | 2.054123734              | 4.21942431                             | 3.591817741                  | 1.53769401               | 0.1035     | 0.15915133  |
|              | 2.079441542              | 4.32407713                             | 3.586292865                  | 1.50685132               | 0.0927     | 0.139685118 |
|              | 2.091864062              | 4.37589525                             | 3.339321978                  | 1.24745792               | 0.0824     | 0.102790532 |
|              | 2.360854001              | 5.57363161                             | 3.328626689                  | 0.96777269               | 0.0724     | 0.070066743 |
|              | 2.501435952              | 6.25718182                             | 3.269568939                  | 0.76813299               | 0.0628     | 0.048238752 |
|              | 2.687847494              | 7.22452415                             | 3.226843995                  | 0.5389965                | 0.0534     | 0.028782413 |
|              | 2.694627181              | 7.26101564                             | 3.18221184                   | 0.48758466               | 0.0442     | 0.021551242 |
|              | 2.734367509              | 7.47676568                             | 3.17805383                   | 0.44368632               | 0.0352     | 0.015617758 |
|              | 2.895911938              | 8.38630595                             | 3.152736022                  | 0.25682408               | 0.0263     | 0.006754473 |
|              | 2.93385687               | 8.60751613                             | 3.058707073                  | 0.1248502                | 0.0175     | 0.002184879 |
|              | 2.960105096              | 8.76222218                             | 3.020424886                  | 0.06031979               | 0.0087     | 0.000524782 |
|              | 3.000719815              | 9.00431941                             | 3.000719815                  | 0                        |            | 0           |
|              | 3.020424886              | 9.12296649                             | 2.960105096                  | -0.0603198               |            | 0           |
|              | 3.058707073              | 9.35568896                             | 2.93385687                   | -0.1248502               |            | 0           |
|              | 3.152736022              | 9.93974443                             | 2.895911938                  | -0.2568241               |            |             |
|              | 3.17805383               | 10.1000261                             | 2.734367509                  | -0.4436863               |            | 6.537684167 |
|              | 3.18221184               | 10.1264722                             | 2.694627181                  | -0.4875847               |            |             |
|              | 3.226843995              | 10.4125222                             | 2.687847494                  | -0.5389965               | W(0.05,43) | 0.943       |
|              | 3.269568939              | 10.690081                              | 2.501435952                  | -0.768133                | W(ln)=     | 0.98083423  |
|              | 3.328626689              | 11.0797556                             | 2.360854001                  | -0.9677727               |            |             |
|              | 3.339321978              | 11.1510713                             | 2.091864062                  | -1.2474579               |            |             |
|              | 3.586292865              | 12.8614965                             | 2.079441542                  | -1.5068513               |            |             |
|              | 3.591817741              | 12.9011547                             | 2.054123734                  | -1.537694                |            |             |
|              | 3.671224519              | 13.4778895                             | 1.987874348                  | -1.6833502               |            |             |
|              | 3.730501129              | 13.9166387                             | 1.974081026                  | -1.7564201               |            |             |
|              | 3.777348102              | 14.2683587                             | 1.887069649                  | -1.8902785               |            |             |
|              | 4.143134726              | 17.1655634                             | 1.808288771                  | -2.334846                |            |             |
|              | 4.188138442              | 17.5405036                             | 1.704748092                  | -2.4833903               |            |             |
|              | 4.228292535              | 17.8784578                             | 1.686398954                  | -2.5418936               |            |             |
|              | 4.282206299              | 18.3372908                             | 1.589235205                  | -2.6929711               |            |             |
|              | 4.682131227              | 21.9223528                             | 1.481604541                  | -3.2005267               |            |             |
|              | 4.844187086              | 23.4661485                             | 1.098612289                  | -3.7455748               |            |             |
|              | 5.043425117              | 25.4361369                             | 0.693147181                  | -4.3502779               |            |             |
|              |                          |                                        |                              |                          |            |             |
|              | Sum of xi                | 125.4314103                            |                              | 125.4314103              |            |             |
|              |                          |                                        |                              |                          |            |             |
| Mean         |                          | 2.917009542                            |                              |                          |            |             |
| n=           |                          | 43                                     |                              |                          |            |             |
| sum of xi^2  |                          | 409.4611119                            |                              |                          |            |             |
| 1/n=         |                          | 0.023255814                            |                              |                          |            |             |
| xi=(sum xi)^ |                          | 15733.03869                            |                              |                          |            |             |
| d=           |                          | 43.57649126                            |                              |                          |            |             |
| W(ln)=       |                          | 0.98083423                             |                              |                          |            |             |
| W(0.05,43)   |                          | 0.943                                  |                              |                          |            |             |
|              |                          | W>W(0.5,43), distribution is lognormal |                              |                          |            |             |

Shapiro Wilk for Cadmium

| smp_id                                      | Cadmium    | $(xi)^2$ | Ordered Conc. x(i) | Reverse Ordered x(n-i+1) | Difference x(n-i+1)-x(i) | a(n-i+1)   | b(i)          | smp_id  |
|---------------------------------------------|------------|----------|--------------------|--------------------------|--------------------------|------------|---------------|---------|
| BKSB101                                     | 0.12       | 0.0144   | 0.02               | 0.79                     | 0.77                     | 0.3872     | 0.298144      | BKSB101 |
| BKSB102                                     | 0.05       | 0.0025   | 0.02               | 0.45                     | 0.43                     | 0.2667     | 0.114681      | BKSB102 |
| BKSB103                                     | 0.025      | 0.00063  | 0.02               | 0.35                     | 0.33                     | 0.2323     | 0.076659      | BKSB103 |
| BKSB104                                     | 0.15       | 0.0225   | 0.02               | 0.29                     | 0.27                     | 0.2072     | 0.055944      | BKSB104 |
| BKSB105                                     | 0.11       | 0.0121   | 0.02               | 0.27                     | 0.25                     | 0.1868     | 0.0467        | BKSB105 |
| BKSB106                                     | 0.16       | 0.0256   | 0.025              | 0.21                     | 0.185                    | 0.1695     | 0.031358      | BKSB106 |
| BKSB107                                     | 0.35       | 0.1225   | 0.025              | 0.2                      | 0.175                    | 0.1542     | 0.026985      | BKSB107 |
| BKSB108                                     | 0.2        | 0.04     | 0.025              | 0.2                      | 0.175                    | 0.1405     | 0.024588      | BKSB108 |
| BKSB109                                     | 0.07       | 0.0049   | 0.05               | 0.2                      | 0.15                     | 0.1278     | 0.01917       | BKSB109 |
| BKSB110                                     | 0.06       | 0.0036   | 0.05               | 0.2                      | 0.15                     | 0.116      | 0.0174        | BKSB110 |
| BKSB111                                     | 0.05       | 0.0025   | 0.06               | 0.2                      | 0.14                     | 0.1049     | 0.014686      | BKSB111 |
| BKSB112                                     | 0.02       | 0.0004   | 0.06               | 0.19                     | 0.13                     | 0.0943     | 0.012259      | BKSB112 |
| BKSB113                                     | 0.07       | 0.0049   | 0.06               | 0.18                     | 0.12                     | 0.0842     | 0.010104      | BKSB113 |
| BKSB114                                     | 0.025      | 0.00063  | 0.06               | 0.18                     | 0.12                     | 0.0745     | 0.00894       | BKSB114 |
| BKSB115                                     | 0.06       | 0.0036   | 0.06               | 0.18                     | 0.12                     | 0.0651     | 0.007812      | BKSB115 |
| BKSB116                                     | 0.2        | 0.04     | 0.07               | 0.17                     | 0.1                      | 0.056      | 0.0056        | BKSB116 |
| BKSB117                                     | 0.18       | 0.0324   | 0.07               | 0.16                     | 0.09                     | 0.0471     | 0.004239      | BKSB117 |
| BKSB118                                     | 0.19       | 0.0361   | 0.07               | 0.15                     | 0.08                     | 0.0383     | 0.003064      | BKSB118 |
| BKSB119                                     | 0.06       | 0.0036   | 0.08               | 0.15                     | 0.07                     | 0.0296     | 0.002072      | BKSB119 |
| BKSB120                                     | 0.02       | 0.0004   | 0.08               | 0.12                     | 0.04                     | 0.0211     | 0.000844      | BKSB120 |
| BKSB121                                     | 0.18       | 0.0324   | 0.11               | 0.11                     | 0                        | 0.0126     | 0             | BKSB121 |
| BKSB122                                     | 0.06       | 0.0036   | 0.11               | 0.11                     | 0                        | 0.0042     | 0             | BKSB122 |
| BKSB123                                     | 0.08       | 0.0064   | 0.11               | 0.11                     | 0                        | 0          | 0             | BKSB123 |
| BKSB124                                     | 0.11       | 0.0121   | 0.11               | 0.11                     | 0                        |            |               | BKSB124 |
| BKSB125                                     | 0.11       | 0.0121   | 0.12               | 0.08                     | -0.04                    |            |               | BKSB125 |
| BKSB126                                     | 0.06       | 0.0036   | 0.15               | 0.08                     | -0.07                    | Sum of b=  | 0.781248      | BKSB126 |
| BKSB127                                     | 0.02       | 0.0004   | 0.15               | 0.07                     | -0.08                    |            |               | BKSB127 |
| BKSB128                                     | 0.025      | 0.00063  | 0.16               | 0.07                     | -0.09                    | W=         | 0.744801      | BKSB128 |
| BKSB129                                     | 0.02       | 0.0004   | 0.17               | 0.07                     | -0.1                     | W(0.05,44) | 0.944         | BKSB129 |
| BKSB130                                     | 0.07       | 0.0049   | 0.18               | 0.06                     | -0.12                    |            |               | BKSB130 |
| BKSB131                                     | 0.15       | 0.0225   | 0.18               | 0.06                     | -0.12                    |            |               | BKSB131 |
| BKSB132                                     | 0.02       | 0.0004   | 0.18               | 0.06                     | -0.12                    |            |               | BKSB132 |
| BKSB133                                     | 0.11       | 0.0121   | 0.19               | 0.06                     | -0.13                    |            |               | BKSB133 |
| BKSB134                                     | 0.08       | 0.0064   | 0.2                | 0.06                     | -0.14                    |            |               | BKSB134 |
| BKSB135                                     | 0.17       | 0.0289   | 0.2                | 0.05                     | -0.15                    |            |               | BKSB135 |
| BKSB136                                     | 0.2        | 0.04     | 0.2                | 0.05                     | -0.15                    |            |               | BKSB136 |
| BKSB137                                     | 0.18       | 0.00063  | 0.2                | 0.025                    | -0.175                   |            |               | BKSB137 |
| BKSB138                                     | 0.21       | 0.0225   | 0.2                | 0.025                    | -0.175                   |            |               | BKSB138 |
| BKSB139                                     | 0.2        | 0.0121   | 0.21               | 0.025                    | -0.185                   |            |               | BKSB139 |
| BKSB140                                     | 0.79       | 0.0256   | 0.27               | 0.02                     | -0.25                    |            |               | BKSB140 |
| BKSB141                                     | 0.45       | 0.1225   | 0.29               | 0.02                     | -0.27                    |            |               | BKSB141 |
| BKSB142                                     | 0.29       | 0.04     | 0.35               | 0.02                     | -0.33                    |            |               | BKSB142 |
| BKSB143                                     | 0.27       | 0.0049   | 0.45               | 0.02                     | -0.43                    |            |               | BKSB143 |
| BKSB144                                     | 0.2        | 0.0036   | 0.79               | 0.02                     | -0.77                    |            |               | BKSB144 |
| Sum of xi                                   | 6.225      |          |                    |                          |                          |            | Sum of xi     |         |
| Mean                                        | 0.14147727 |          |                    |                          |                          |            | Mean          |         |
| n=                                          | 44         |          |                    |                          |                          |            | n=            |         |
| sum of xi^2                                 | 1.700175   |          |                    |                          |                          |            | sum of xi^2   |         |
| 1/n=                                        | 0.02272727 |          |                    |                          |                          |            | 1/n=          |         |
| xi=(sum xi)^2                               | 38.750625  |          |                    |                          |                          |            | xi=(sum xi)^2 |         |
| d=                                          | 0.81947898 |          |                    |                          |                          |            | d=            |         |
| W=                                          | 0.7448006  |          |                    |                          |                          |            | W=            |         |
| W(0.05,44)=                                 | 0.944      |          |                    |                          |                          |            | W(0.05,44)=   |         |
| W<W(0.5,44), the distribution is not normal |            |          |                    |                          |                          |            |               |         |
|                                             |            |          |                    |                          |                          |            |               |         |
|                                             |            |          |                    |                          |                          |            |               |         |

## Shapiro Wilk for Cadmium

| ln of ordered Conc. x(i) | ln(xi)^2  | ln of Reverse Order x(n-i+1) | Difference x(n-i+1)-x(i) | a(n-i+1)   | b(i)       |
|--------------------------|-----------|------------------------------|--------------------------|------------|------------|
| -3.912023005             | 15.303924 | -0.2357223                   | 3.67630067               | 0.3872     | 1.42346362 |
| -3.912023005             | 15.303924 | -0.7985077                   | 3.11351531               | 0.2667     | 0.83037453 |
| -3.912023005             | 15.303924 | -1.0498221                   | 2.86220088               | 0.2323     | 0.66488926 |
| -3.912023005             | 15.303924 | -1.2378744                   | 2.67414865               | 0.2072     | 0.55408361 |
| -3.912023005             | 15.303924 | -1.3093333                   | 2.60268969               | 0.1868     | 0.48618243 |
| -3.688879454             | 13.607832 | -1.5606477                   | 2.12823171               | 0.1695     | 0.36073527 |
| -3.688879454             | 13.607832 | -1.6094379                   | 2.07944154               | 0.1542     | 0.32064989 |
| -3.688879454             | 13.607832 | -1.6094379                   | 2.07944154               | 0.1405     | 0.29216154 |
| -2.995732274             | 8.9744119 | -1.6094379                   | 1.38629436               | 0.1278     | 0.17716842 |
| -2.995732274             | 8.9744119 | -1.6094379                   | 1.38629436               | 0.116      | 0.16081015 |
| -2.813410717             | 7.9152799 | -1.6094379                   | 1.2039728                | 0.1049     | 0.12629675 |
| -2.813410717             | 7.9152799 | -1.6607312                   | 1.15267951               | 0.0943     | 0.10869768 |
| -2.813410717             | 7.9152799 | -1.7147984                   | 1.09861229               | 0.0842     | 0.09250315 |
| -2.813410717             | 7.9152799 | -1.7147984                   | 1.09861229               | 0.0745     | 0.08184662 |
| -2.813410717             | 7.9152799 | -1.7147984                   | 1.09861229               | 0.0651     | 0.07151966 |
| -2.659260037             | 7.0716639 | -1.7719568                   | 0.8873032                | 0.056      | 0.04968898 |
| -2.659260037             | 7.0716639 | -1.8325815                   | 0.82667857               | 0.0471     | 0.03936565 |
| -2.659260037             | 7.0716639 | -1.89712                     | 0.76214005               | 0.0383     | 0.02918990 |
| -2.525728644             | 6.3793052 | -1.89712                     | 0.62860866               | 0.0296     | 0.01860682 |
| -2.525728644             | 6.3793052 | -2.1202635                   | 0.40546511               | 0.0211     | 0.00855531 |
| -2.207274913             | 4.8720625 | -2.2072749                   | 0                        | 0.0126     | 0          |
| -2.207274913             | 4.8720625 | -2.2072749                   | 0                        | 0.0042     | 0          |
| -2.207274913             | 4.8720625 | -2.2072749                   | 0                        | 0          | 0          |
| -2.207274913             | 4.8720625 | -2.2072749                   | 0                        | 0          | 0          |
| -2.120263536             | 4.4955175 | -2.5257286                   | -0.40546511              |            |            |
| -1.897119985             | 3.5990642 | -2.5257286                   | -0.62860866              | Sum of b=  | 5.8963602  |
| -1.897119985             | 3.5990642 | -2.65926                     | -0.76214005              |            |            |
| -1.832581464             | 3.3583548 | -2.65926                     | -0.82667857              | W=         | 0.94177684 |
| -1.771956842             | 3.139831  | -2.65926                     | -0.8873032               | W(0.05,44) | 0.944      |
| -1.714798428             | 2.9405336 | -2.8134107                   | -1.09861229              |            |            |
| -1.714798428             | 2.9405336 | -2.8134107                   | -1.09861229              |            |            |
| -1.660731207             | 2.7580281 | -2.8134107                   | -1.15267951              |            |            |
| -1.609437912             | 2.5902904 | -2.8134107                   | -1.2039728               |            |            |
| -1.609437912             | 2.5902904 | -2.9957323                   | -1.38629436              |            |            |
| -1.609437912             | 2.5902904 | -2.9957323                   | -1.38629436              |            |            |
| -1.609437912             | 2.5902904 | -3.6888795                   | -2.07944154              |            |            |
| -1.609437912             | 2.5902904 | -3.6888795                   | -2.07944154              |            |            |
| -1.560647748             | 2.4356214 | -3.6888795                   | -2.12823171              |            |            |
| -1.30933332              | 1.7143537 | -3.912023                    | -2.60268969              |            |            |
| -1.237874356             | 1.5323329 | -3.912023                    | -2.67414865              |            |            |
| -1.049822124             | 1.1021265 | -3.912023                    | -2.86220088              |            |            |
| -0.798507696             | 0.6376145 | -3.912023                    | -3.11351531              |            |            |
| -0.235722334             | 0.055565  | -3.912023                    | -3.67630067              |            |            |
| -103.106874              |           |                              |                          |            |            |
| -2.343338046             |           |                              |                          |            |            |
| 44                       |           |                              |                          |            |            |
| 278.5307172              |           |                              |                          |            |            |
| 0.022727273              |           |                              |                          |            |            |
| 10631.02747              |           |                              |                          |            |            |
| 36.91645655              |           |                              |                          |            |            |
| 0.941776836              |           |                              |                          |            |            |
| 0.944                    |           |                              |                          |            |            |

### Shapiro Wilk Chromium

| smp_id                                        | Chromium   | Ordered Conc. x(i) | Reverse Ordered x(n-i+1) | Difference x(n-i+1)-x(i) | a(n-i+1)   | b(i)     |
|-----------------------------------------------|------------|--------------------|--------------------------|--------------------------|------------|----------|
| BKSB101                                       | 5.1        | 0.93               | 23.6                     | 22.67                    | 0.3872     | 8.777824 |
| BKSB102                                       | 10.3       | 1.2                | 20.3                     | 19.1                     | 0.2667     | 5.09397  |
| BKSB103                                       | 10.1       | 1.8                | 16.6                     | 14.8                     | 0.2323     | 3.43804  |
| BKSB104                                       | 3.1        | 2.1                | 16.1                     | 14                       | 0.2072     | 2.9008   |
| BKSB105                                       | 4          | 2.2                | 12.9                     | 10.7                     | 0.1868     | 1.99876  |
| BKSB106                                       | 7.6        | 2.7                | 12.2                     | 9.5                      | 0.1695     | 1.61025  |
| BKSB107                                       | 5.1        | 3.1                | 11.1                     | 8                        | 0.1542     | 1.2336   |
| BKSB108                                       | 12.9       | 3.7                | 10.3                     | 6.6                      | 0.1405     | 0.9273   |
| BKSB109                                       | 6.5        | 4                  | 10.1                     | 6.1                      | 0.1278     | 0.77958  |
| BKSB110                                       | 16.6       | 4                  | 8.9                      | 4.9                      | 0.116      | 0.5684   |
| BKSB111                                       | 6.2        | 4.3                | 8.5                      | 4.2                      | 0.1049     | 0.44058  |
| BKSB112                                       | 4          | 4.6                | 8.4                      | 3.8                      | 0.0943     | 0.35834  |
| BKSB113                                       | 8.9        | 4.9                | 8.4                      | 3.5                      | 0.0842     | 0.2947   |
| BKSB114                                       | 20.3       | 4.9                | 8.30                     | 3.4                      | 0.0745     | 0.2533   |
| BKSB115                                       | 7.3        | 5.1                | 8.1                      | 3                        | 0.0651     | 0.1953   |
| BKSB116                                       | 2.7        | 5.1                | 7.7                      | 2.6                      | 0.056      | 0.1456   |
| BKSB117                                       | 5.7        | 5.1                | 7.6                      | 2.5                      | 0.0471     | 0.11775  |
| BKSB118                                       | 2.2        | 5.5                | 7.3                      | 1.8                      | 0.0383     | 0.06894  |
| BKSB119                                       | 2.1        | 5.7                | 7.2                      | 1.5                      | 0.0296     | 0.0444   |
| BKSB120                                       | 0.93       | 5.9                | 6.5                      | 0.6                      | 0.0211     | 0.01266  |
| BKSB121                                       | 6.3        | 6.1                | 6.5                      | 0.4                      | 0.0126     | 0.00504  |
| BKSB122                                       | 4.9        | 6.2                | 6.3                      | 0.1                      | 0.0042     | 0.00042  |
| BKSB123                                       | 4.3        | 6.3                | 6.2                      | -0.1                     | 0          | 0        |
| BKSB124                                       | 7.2        | 6.5                | 6.1                      | -0.4                     | 0.0037     | -0.00148 |
| BKSB125                                       | 5.1        | 6.5                | 5.9                      | -0.6                     | Sum of b=  |          |
| BKSB126                                       | 5.5        | 7.2                | 5.7                      | -1.5                     |            |          |
| BKSB127                                       | 3.7        | 7.3                | 5.5                      | -1.8                     | W=         |          |
| BKSB128                                       | 8.5        | 7.6                | 5.1                      | -2.5                     | W(0.05,45) |          |
| BKSB129                                       | 4.6        | 7.7                | 5.1                      | -2.6                     |            |          |
| BKSB130                                       | 1.8        | 8.1                | 5.1                      | -3                       |            |          |
| BKSB131                                       | 7.7        | 8.30               | 4.9                      | -3.4                     |            |          |
| BKSB132                                       | 5.9        | 8.4                | 4.9                      | -3.5                     |            |          |
| BKSB133                                       | 4.9        | 8.4                | 4.6                      | -3.8                     |            |          |
| BKSB134                                       | 1.2        | 8.5                | 4.3                      | -4.2                     |            |          |
| BKSB135                                       | 6.1        | 8.9                | 4                        | -4.9                     |            |          |
| BKSB136                                       | 8.30       | 10.1               | 4                        | -6.1                     |            |          |
| BKSB137                                       | 8.1        | 10.3               | 3.7                      | -6.6                     |            |          |
| BKSB138                                       | 11.1       | 11.1               | 3.1                      | -8                       |            |          |
| BKSB139                                       | 8.4        | 12.2               | 2.7                      | -9.5                     |            |          |
| BKSB140                                       | 16.1       | 12.9               | 2.2                      | -10.7                    |            |          |
| BKSB141                                       | 23.6       | 16.1               | 2.1                      | -14                      |            |          |
| BKSB142                                       | 8.4        | 16.6               | 1.8                      | -14.8                    |            |          |
| BKSB143                                       | 12.2       | 20.3               | 1.2                      | -19.1                    |            |          |
| BKSB144                                       | 6.5        | 23.6               | 0.93                     | -22.67                   |            |          |
| Sum of x <sub>i</sub>                         |            | 322.03             |                          |                          |            |          |
| Mean                                          | 7.31886364 |                    |                          |                          |            |          |
| n=                                            | 44         |                    |                          |                          |            |          |
| sum of x <sub>i</sub> <sup>2</sup>            | 3340.1149  |                    |                          |                          |            |          |
| 1/n=                                          | 0.02272727 |                    |                          |                          |            |          |
| x <sub>n</sub> (sum xi) <sup>2</sup>          | 103703.321 |                    |                          |                          |            |          |
| d=                                            | 983.221243 |                    |                          |                          |            |          |
| W=                                            | 0.87100033 |                    |                          |                          |            |          |
| W(0.05,44)=                                   | 0.944      |                    |                          |                          |            |          |
| W < W(0.5,45), the distribution is not normal |            |                    |                          |                          |            |          |

### Shapiro Wilk Chromium

| smp_id                                     | ln of ordered Conc. x(i) | ln(xi)^2   | ln of Reverse Order x(n-i+1) | Difference x(n-i+1)-x(i) | a(n-i+1)   | b(i)       |
|--------------------------------------------|--------------------------|------------|------------------------------|--------------------------|------------|------------|
| BKSB101                                    | -0.07257069              | 0.00526651 | 3.161246712                  | 3.2338174                | 0.3872     | 1.2521341  |
| BKSB102                                    | 0.182321557              | 0.03324115 | 3.010620886                  | 2.82829933               | 0.2667     | 0.75430743 |
| BKSB103                                    | 0.587786665              | 0.34549316 | 2.809402695                  | 2.22161603               | 0.2323     | 0.5160814  |
| BKSB104                                    | 0.741937345              | 0.55047102 | 2.778819272                  | 2.03688193               | 0.2072     | 0.42204194 |
| BKSB105                                    | 0.78845736               | 0.62166501 | 2.557227311                  | 1.76876995               | 0.1868     | 0.33040623 |
| BKSB106                                    | 0.993251773              | 0.98654908 | 2.501435952                  | 1.50818418               | 0.1695     | 0.25563722 |
| BKSB107                                    | 1.131402111              | 1.28007074 | 2.406945108                  | 1.275543                 | 0.1542     | 0.19668873 |
| BKSB108                                    | 1.30833282               | 1.71173477 | 2.332143895                  | 1.02381108               | 0.1405     | 0.14384546 |
| BKSB109                                    | 1.386294361              | 1.92181206 | 2.312535424                  | 0.92624106               | 0.1278     | 0.11837361 |
| BKSB110                                    | 1.386294361              | 1.92181206 | 2.186051277                  | 0.79975692               | 0.116      | 0.09277118 |
| BKSB111                                    | 1.458615023              | 2.12755778 | 2.140066163                  | 0.68145114               | 0.1049     | 0.07148422 |
| BKSB112                                    | 1.526056303              | 2.32884784 | 2.128231706                  | 0.6021754                | 0.0943     | 0.05678514 |
| BKSB113                                    | 1.589235205              | 2.52566854 | 2.128231706                  | 0.5389965                | 0.0842     | 0.04538351 |
| BKSB114                                    | 1.589235205              | 2.52566854 | 2.116255515                  | 0.52702031               | 0.0745     | 0.03926301 |
| BKSB115                                    | 1.62924054               | 2.65442474 | 2.091864062                  | 0.46262352               | 0.0651     | 0.03011679 |
| BKSB116                                    | 1.62924054               | 2.65442474 | 2.041220329                  | 0.41197979               | 0.056      | 0.02307087 |
| BKSB117                                    | 1.62924054               | 2.65442474 | 2.028148247                  | 0.39890771               | 0.0471     | 0.01878855 |
| BKSB118                                    | 1.704748092              | 2.90616606 | 1.987874348                  | 0.28312626               | 0.0383     | 0.01084374 |
| BKSB119                                    | 1.740466175              | 3.02922251 | 1.974081026                  | 0.23361485               | 0.0296     | 0.006915   |
| BKSB120                                    | 1.774952351              | 3.15045585 | 1.871802177                  | 0.09684983               | 0.0211     | 0.00204353 |
| BKSB121                                    | 1.808288771              | 3.26990828 | 1.871802177                  | 0.06351341               | 0.0126     | 0.00080027 |
| BKSB122                                    | 1.824549292              | 3.32898012 | 1.840549633                  | 0.01600034               | 0.0042     | 6.7201E-05 |
| BKSB123                                    | 1.840549633              | 3.38762295 | 1.824549292                  | -0.0160003               | 0          | 0          |
| BKSB124                                    | 1.871802177              | 3.50364339 | 1.808288771                  | -0.0635134               |            | 0          |
| BKSB125                                    | 1.871802177              | 3.50364339 | 1.774952351                  | -0.0968498               | Sum of b=  | 4.38784974 |
| BKSB126                                    | 1.974081026              | 3.8969959  | 1.740466175                  | -0.2336149               |            |            |
| BKSB127                                    | 1.987874348              | 3.95164442 | 1.704748092                  | -0.2831263               | W=         | 0.96653268 |
| BKSB128                                    | 2.028148247              | 4.11338531 | 1.62924054                   | -0.3989077               | W(0.05,45) | 0.945      |
| BKSB129                                    | 2.041220329              | 4.16658043 | 1.62924054                   | -0.4119798               |            |            |
| BKSB130                                    | 2.091864062              | 4.37589525 | 1.62924054                   | -0.4626235               |            |            |
| BKSB131                                    | 2.116255515              | 4.4785374  | 1.589235205                  | -0.5270203               |            |            |
| BKSB132                                    | 2.128231706              | 4.52937019 | 1.589235205                  | -0.5389965               |            |            |
| BKSB133                                    | 2.128231706              | 4.52937019 | 1.526056303                  | -0.6021754               |            |            |
| BKSB134                                    | 2.140066163              | 4.57988318 | 1.458615023                  | -0.6814511               |            |            |
| BKSB135                                    | 2.186051277              | 4.77882018 | 1.386294361                  | -0.7997569               |            |            |
| BKSB136                                    | 2.312535424              | 5.34782009 | 1.386294361                  | -0.9262411               |            |            |
| BKSB137                                    | 2.332143895              | 5.79338475 | 1.30833282                   | -1.0238111               |            |            |
| BKSB138                                    | 2.406945108              | 6.25718182 | 1.131402111                  | -1.275543                |            |            |
| BKSB139                                    | 2.501435952              | 6.53941152 | 0.993251773                  | -1.5081842               |            |            |
| BKSB140                                    | 2.557227311              | 7.72183655 | 0.78845736                   | -1.76877                 |            |            |
| BKSB141                                    | 2.778819272              | 7.8927435  | 0.741937345                  | -2.0368819               |            |            |
| BKSB142                                    | 2.809402695              | 9.06383812 | 0.587786665                  | -2.221616                |            |            |
| BKSB143                                    | 3.010620886              | 9.99348077 | 0.182321557                  | -2.8282993               |            |            |
| BKSB144                                    | 3.161246712              | #REF!      | -0.072570693                 | -3.2338174               |            |            |
| Sum of x <sub>i</sub>                      | 78.61393132              |            |                              |                          |            |            |
| Mean                                       | 1.786680257              |            |                              |                          |            |            |
| n=                                         | 44                       |            |                              |                          |            |            |
| sum of x <sub>i</sub> <sup>2</sup>         | 160.3778498              |            |                              |                          |            |            |
| 1/n=                                       | 0.022727273              |            |                              |                          |            |            |
| x <sub>i</sub> -(sum xi) <sup>1/2</sup>    | 6180.150197              |            |                              |                          |            |            |
| d=                                         | 19.91989073              |            |                              |                          |            |            |
| W=                                         | 0.96653268               |            |                              |                          |            |            |
| W(0.05,44)                                 | 0.944                    |            |                              |                          |            |            |
| W>W(0.5,44), the distribution is lognormal |                          |            |                              |                          |            |            |
|                                            |                          |            |                              |                          |            |            |
|                                            |                          |            |                              |                          |            |            |

### Shapiro Wilk for Lead

| smp_id                                      | Lead     | Ordered Conc. x(i) | Reverse Ordered x(n-i+1) | Difference x(n-i+1)-x(i) | a(n-i+1)   | b(i)     |
|---------------------------------------------|----------|--------------------|--------------------------|--------------------------|------------|----------|
| BKSB101                                     | 6        | 0.72               | 33.2                     | 32.48                    | 0.3872     | 12.57626 |
| BKSB102                                     | 5        | 1.3                | 12.1                     | 10.8                     | 0.2667     | 2.88036  |
| BKSB103                                     | 9.5      | 1.5                | 10.2                     | 8.7                      | 0.2323     | 2.02101  |
| BKSB104                                     | 5.3      | 1.5                | 10.1                     | 8.6                      | 0.2072     | 1.78192  |
| BKSB105                                     | 3.9      | 1.7                | 9.8                      | 8.1                      | 0.1868     | 1.51308  |
| BKSB106                                     | 5        | 2.3                | 9.5                      | 7.2                      | 0.1695     | 1.2204   |
| BKSB107                                     | 6.1      | 2.3                | 8.3                      | 6                        | 0.1542     | 0.9252   |
| BKSB108                                     | 9.8      | 2.5                | 7.8                      | 5.3                      | 0.1405     | 0.74465  |
| BKSB109                                     | 3.2      | 3.00               | 7.8                      | 4.8                      | 0.1278     | 0.61344  |
| BKSB110                                     | 7.8      | 3.1                | 7.7                      | 4.6                      | 0.116      | 0.5336   |
| BKSB111                                     | 5.3      | 3.2                | 7.5                      | 4.3                      | 0.1049     | 0.45107  |
| BKSB112                                     | 1.5      | 3.6                | 6.6                      | 3                        | 0.0943     | 0.2829   |
| BKSB113                                     | 6        | 3.7                | 6.3                      | 2.6                      | 0.0842     | 0.21892  |
| BKSB114                                     | 7.7      | 3.8                | 6.1                      | 2.3                      | 0.0745     | 0.17135  |
| BKSB115                                     | 5.1      | 3.8                | 6                        | 2.2                      | 0.0651     | 0.14322  |
| BKSB116                                     | 5.6      | 3.9                | 6                        | 2.1                      | 0.056      | 0.1176   |
| BKSB117                                     | 8.3      | 4                  | 5.6                      | 1.6                      | 0.0471     | 0.07536  |
| BKSB118                                     | 3.7      | 4.1                | 5.3                      | 1.2                      | 0.0383     | 0.04596  |
| BKSB119                                     | 1.3      | 4.1                | 5.3                      | 1.2                      | 0.0296     | 0.03552  |
| BKSB120                                     | 0.72     | 4.1                | 5.1                      | 1                        | 0.0211     | 0.0211   |
| BKSB121                                     | 10.2     | 4.5                | 5                        | 0.5                      | 0.0126     | 0.0063   |
| BKSB122                                     | 4.1      | 5                  | 5                        | 0                        | 0.0042     | 0        |
| BKSB123                                     | 3.8      | 5                  | 5                        | 0                        | 0          | 0        |
| BKSB124                                     | 4.5      | 5                  | 4.5                      | -0.5                     |            | 0        |
| BKSB125                                     | 1.7      | 5.1                | 4.1                      | -1                       |            |          |
| BKSB126                                     | 1.5      | 5.3                | 4.1                      | -1.2                     | Sum of b=  | 26.37922 |
| BKSB127                                     | 3.8      | 5.3                | 4.1                      | -1.2                     |            |          |
| BKSB128                                     | 7.5      | 5.6                | 4                        | -1.6                     | W=         | 0.647733 |
| BKSB129                                     | 4.1      | 6                  | 3.9                      | -2.1                     | W(0.05,45) | 0.945    |
| BKSB130                                     | 3.1      | 6                  | 3.8                      | -2.2                     |            |          |
| BKSB131                                     | 10.1     | 6.1                | 3.8                      | -2.3                     |            |          |
| BKSB132                                     | 7.8      | 6.3                | 3.7                      | -2.6                     |            |          |
| BKSB133                                     | 6.3      | 6.6                | 3.6                      | -3                       |            |          |
| BKSB134                                     | 2.3      | 7.5                | 3.2                      | -4.3                     |            |          |
| BKSB135                                     | 2.5      | 7.7                | 3.1                      | -4.6                     |            |          |
| BKSB136                                     | 3.00     | 7.8                | 3.00                     | -4.8                     |            |          |
| BKSB137                                     | 2.3      | 7.8                | 2.5                      | -5.3                     |            |          |
| BKSB138                                     | 4.1      | 8.3                | 2.3                      | -6                       |            |          |
| BKSB139                                     | 3.6      | 9.5                | 2.3                      | -7.2                     |            |          |
| BKSB140                                     | 33.2     | 9.8                | 1.7                      | -8.1                     |            |          |
| BKSB141                                     | 12.1     | 10.1               | 1.5                      | -8.6                     |            |          |
| BKSB142                                     | 5        | 10.2               | 1.5                      | -8.7                     |            |          |
| BKSB143                                     | 6.6      | 12.1               | 1.3                      | -10.8                    |            |          |
| BKSB144                                     | 4        | 33.2               | 0.72                     | -32.48                   |            |          |
| Sum of xi                                   | 254.02   |                    |                          |                          |            |          |
| Mean                                        | 5.773182 |                    |                          |                          |            |          |
| n=                                          | 44       |                    |                          |                          |            |          |
| sum of xi^2                                 | 2540.808 |                    |                          |                          |            |          |
| 1/n=                                        | 0.022727 |                    |                          |                          |            |          |
| xi=(sum xi)^2                               | 64526.16 |                    |                          |                          |            |          |
| d=                                          | 1074.305 |                    |                          |                          |            |          |
| W=                                          | 0.647733 |                    |                          |                          |            |          |
| W(0.05,44)=                                 | 0.944    |                    |                          |                          |            |          |
| W<W(0.5,44), the distribution is not normal |          |                    |                          |                          |            |          |

# Shapiro Wilk for Lead

| smp_id                                     | ln of ordered Conc. x(i) | ln(xi)^2    | ln of Reverse Order x(n-i+1) | Difference x(n-i+1)-x(i) | a(n-i+1)   | b(i)       |
|--------------------------------------------|--------------------------|-------------|------------------------------|--------------------------|------------|------------|
| BKSB101                                    | -0.328504067             | 0.107914922 | 3.502549876                  | 3.83105394               | 0.3872     | 1.48338409 |
| BKSB102                                    | 0.262364264              | 0.068835007 | 2.493205453                  | 2.23084119               | 0.2667     | 0.59496534 |
| BKSB103                                    | 0.405465108              | 0.164401954 | 2.32238772                   | 1.91692261               | 0.2323     | 0.44530112 |
| BKSB104                                    | 0.405465108              | 0.164401954 | 2.312535424                  | 1.90707032               | 0.2072     | 0.39514497 |
| BKSB105                                    | 0.530628251              | 0.281566341 | 2.282382386                  | 1.75175413               | 0.1868     | 0.32722767 |
| BKSB106                                    | 0.832909123              | 0.693737607 | 2.251291799                  | 1.41838268               | 0.1695     | 0.24041586 |
| BKSB107                                    | 0.832909123              | 0.693737607 | 2.116255515                  | 1.28334639               | 0.1542     | 0.19789201 |
| BKSB108                                    | 0.916290732              | 0.839588705 | 2.054123734                  | 1.137833                 | 0.1405     | 0.15986554 |
| BKSB109                                    | 1.098612289              | 1.206948961 | 2.054123734                  | 0.95551145               | 0.1278     | 0.12211436 |
| BKSB110                                    | 1.131402111              | 1.280070738 | 2.041220329                  | 0.90981822               | 0.116      | 0.10553891 |
| BKSB111                                    | 1.16315081               | 1.352919806 | 2.014903021                  | 0.85175221               | 0.1049     | 0.08934881 |
| BKSB112                                    | 1.280933845              | 1.640791516 | 1.887069649                  | 0.6061358                | 0.0943     | 0.05715861 |
| BKSB113                                    | 1.30833282               | 1.711734767 | 1.840549633                  | 0.53221681               | 0.0842     | 0.04481266 |
| BKSB114                                    | 1.335001067              | 1.782227848 | 1.808288771                  | 0.4732877                | 0.0745     | 0.03525993 |
| BKSB115                                    | 1.335001067              | 1.782227848 | 1.791759469                  | 0.4567584                | 0.0651     | 0.02973497 |
| BKSB116                                    | 1.360976553              | 1.852257178 | 1.791759469                  | 0.43078292               | 0.056      | 0.02412384 |
| BKSB117                                    | 1.386294361              | 1.921812056 | 1.722766598                  | 0.33647224               | 0.0471     | 0.01584784 |
| BKSB118                                    | 1.410986974              | 1.99088424  | 1.667706821                  | 0.25671985               | 0.0383     | 0.00983237 |
| BKSB119                                    | 1.410986974              | 1.99088424  | 1.667706821                  | 0.25671985               | 0.0296     | 0.00759891 |
| BKSB120                                    | 1.410986974              | 1.99088424  | 1.62924054                   | 0.21825357               | 0.0211     | 0.00460515 |
| BKSB121                                    | 1.504077397              | 2.262248815 | 1.609437912                  | 0.10536052               | 0.0126     | 0.00132754 |
| BKSB122                                    | 1.609437912              | 2.590290394 | 1.609437912                  | 0                        | 0.0042     | 0          |
| BKSB123                                    | 1.609437912              | 2.590290394 | 1.609437912                  | 0                        |            | 0          |
| BKSB124                                    | 1.609437912              | 2.590290394 | 1.504077397                  | -0.10536052              |            | 0          |
| BKSB125                                    | 1.62924054               | 2.654424736 | 1.410986974                  | -0.21825357              |            |            |
| BKSB126                                    | 1.667706821              | 2.781246039 | 1.410986974                  | -0.25671985              | Sum of b=  | 4.39150052 |
| BKSB127                                    | 1.667706821              | 2.781246039 | 1.410986974                  | -0.25671985              |            |            |
| BKSB128                                    | 1.722766598              | 2.96792475  | 1.386294361                  | -0.33647224              | W(ln)=     | 0.97536815 |
| BKSB129                                    | 1.791759469              | 3.210401996 | 1.360976553                  | -0.43078292              |            |            |
| BKSB130                                    | 1.791759469              | 3.210401996 | 1.335001067                  | -0.4567584               | W(0.05,44) | 0.944      |
| BKSB131                                    | 1.808288771              | 3.26990828  | 1.335001067                  | -0.4732877               |            |            |
| BKSB132                                    | 1.840549633              | 3.387622953 | 1.30833282                   | -0.53221681              |            |            |
| BKSB133                                    | 1.887069649              | 3.56103186  | 1.280933845                  | -0.6061358               |            |            |
| BKSB134                                    | 2.014903021              | 4.059834182 | 1.16315081                   | -0.85175221              |            |            |
| BKSB135                                    | 2.041220329              | 4.166580431 | 1.131402111                  | -0.90981822              |            |            |
| BKSB136                                    | 2.054123734              | 4.219424313 | 1.098612289                  | -0.95551145              |            |            |
| BKSB137                                    | 2.054123734              | 4.219424313 | 0.916290732                  | -1.137833                |            |            |
| BKSB138                                    | 2.116255515              | 4.478537404 | 0.832909123                  | -1.28334639              |            |            |
| BKSB139                                    | 2.251291799              | 5.068314762 | 0.832909123                  | -1.41838268              |            |            |
| BKSB140                                    | 2.282382386              | 5.209269354 | 0.530628251                  | -1.75175413              |            |            |
| BKSB141                                    | 2.312535424              | 5.347820087 | 0.405465108                  | -1.90707032              |            |            |
| BKSB142                                    | 2.32238772               | 5.393484723 | 0.405465108                  | -1.91692261              |            |            |
| BKSB143                                    | 2.493205453              | 6.216073429 | 0.262364264                  | -2.23084119              |            |            |
| BKSB144                                    | 3.502549876              | 12.26785563 | -0.328504067                 | -3.83105394              |            |            |
| Sum of xi                                  | 67.07441138              |             |                              |                          |            |            |
| Mean                                       | 1.52441844               |             | —                            |                          |            |            |
| n=                                         | 44                       |             |                              |                          |            |            |
| sum of xi^2                                | 122.0217748              |             |                              |                          |            |            |
| 1/n=                                       | 0.022727273              |             |                              |                          |            |            |
| xi=(sum xi)^2                              | 4498.9766662             |             |                              |                          |            |            |
| d=                                         | 19.77230523              |             |                              |                          |            |            |
| W(ln)=                                     | 0.975368151              |             |                              |                          |            |            |
| W(0.05,44)=                                | 0.944                    |             |                              |                          |            |            |
| W>W(0.5,44), the distribution is lognormal |                          |             |                              |                          |            |            |

Shapiro Wilk for Arsenic

| smp_id                                                   | Arsenic   |      |      |        | a(n-i+1)   | b(i)        |
|----------------------------------------------------------|-----------|------|------|--------|------------|-------------|
| BKSB101                                                  | 3         | 0.44 | 11.6 | 11.16  | 0.3894     | 4.345704    |
| BKSB102                                                  | 2         | 0.66 | 9.2  | 8.54   | 0.2684     | 2.292136    |
| BKSB103                                                  | 9.1       | 1    | 9.1  | 8.1    | 0.2334     | 1.89054     |
| BKSB104                                                  | 6.2       | 1.6  | 8.2  | 6.6    | 0.2078     | 1.37148     |
| BKSB105                                                  | 4.3       | 1.9  | 7.6  | 5.7    | 0.1871     | 1.06647     |
| BKSB106                                                  | 4.4       | 2    | 6.2  | 4.2    | 0.1695     | 0.7119      |
| BKSB108                                                  | 6         | 2.5  | 6    | 3.5    | 0.1539     | 0.53865     |
| BKSB109                                                  | 3.5       | 2.6  | 6    | 3.4    | 0.1398     | 0.47532     |
| BKSB110                                                  | 4.8       | 2.6  | 5.7  | 3.1    | 0.1269     | 0.39339     |
| BKSB111                                                  | 5.2       | 2.7  | 5.6  | 2.9    | 0.1149     | 0.33321     |
| BKSB112                                                  | 1.6       | 2.9  | 5.3  | 2.4    | 0.1035     | 0.2484      |
| BKSB113                                                  | 5.7       | 3    | 5.3  | 2.3    | 0.0927     | 0.21321     |
| BKSB114                                                  | 5.2       | 3.2  | 5.2  | 2      | 0.0824     | 0.1648      |
| BKSB115                                                  | 5.3       | 3.2  | 5.2  | 2      | 0.0724     | 0.1448      |
| BKSB116                                                  | 11.6      | 3.2  | 4.8  | 1.6    | 0.0628     | 0.10048     |
| BKSB117                                                  | 4.4       | 3.5  | 4.8  | 1.3    | 0.0534     | 0.06942     |
| BKSB118                                                  | 2.6       | 3.6  | 4.4  | 0.8    | 0.0442     | 0.03536     |
| BKSB119                                                  | 0.66      | 3.7  | 4.4  | 0.7    | 0.0352     | 0.02464     |
| BKSB120                                                  | 0.44      | 3.8  | 4.3  | 0.5    | 0.0263     | 0.01315     |
| BKSB121                                                  | 4.1       | 3.8  | 4.30 | 0.5    | 0.0175     | 0.00875     |
| BKSB122                                                  | 3.2       | 3.8  | 4.2  | 0.4    | 0.0087     | 0.00348     |
| BKSB123                                                  | 3.8       | 4.1  | 4.1  | 0      | 0          | 0           |
| BKSB124                                                  | 6         | 4.2  | 3.8  | -0.4   |            |             |
| BKSB125                                                  | 3.2       | 4.3  | 3.8  | -0.5   |            |             |
| BKSB126                                                  | 2.5       | 4.30 | 3.8  | -0.5   | sum Bi=    | 14.44529    |
| BKSB127                                                  | 1.9       | 4.4  | 3.7  | -0.7   |            |             |
| BKSB128                                                  | 3.6       | 4.4  | 3.6  | -0.8   | W(0.05,43) | 0.943       |
| BKSB129                                                  | 2.6       | 4.8  | 3.5  | -1.3   | W=         | 0.939827935 |
| BKSB130                                                  | 1         | 4.8  | 3.2  | -1.6   |            |             |
| BKSB131                                                  | 5.3       | 5.2  | 3.2  | -2     |            |             |
| BKSB132                                                  | 4.2       | 5.2  | 3.2  | -2     |            |             |
| BKSB133                                                  | 3.2       | 5.3  | 3    | -2.3   |            |             |
| BKSB134                                                  | 2.9       | 5.3  | 2.9  | -2.4   |            |             |
| BKSB135                                                  | 2.7       | 5.6  | 2.7  | -2.9   |            |             |
| BKSB136                                                  | 4.30      | 5.7  | 2.6  | -3.1   |            |             |
| BKSB137                                                  | 8.2       | 6    | 2.6  | -3.4   |            |             |
| BKSB138                                                  | 9.2       | 6    | 2.5  | -3.5   |            |             |
| BKSB139                                                  | 7.6       | 6.2  | 2    | -4.2   |            |             |
| BKSB140                                                  | 4.8       | 7.6  | 1.9  | -5.7   |            |             |
| BKSB141                                                  | 5.6       | 8.2  | 1.6  | -6.6   |            |             |
| BKSB142                                                  | 3.8       | 9.1  | 1    | -8.1   |            |             |
| BKSB143                                                  | 3.8       | 9.2  | 0.66 | -8.54  |            |             |
| BKSB144                                                  | 3.7       | 11.6 | 0.44 | -11.16 |            |             |
| Sum of xi                                                | 187.2     |      |      |        |            |             |
| Mean                                                     | 4.3534884 |      |      |        |            |             |
| n=                                                       | 43        |      |      |        |            |             |
| sum of xi^2                                              | 1036.9992 |      |      |        |            |             |
| 1/n=                                                     | 0.0232558 |      |      |        |            |             |
| xi=(sum xi)^2                                            | 35043.84  |      |      |        |            |             |
| d=                                                       | 222.02618 |      |      |        |            |             |
| W=                                                       | 0.9398279 |      |      |        |            |             |
| W(0.05,43)=                                              | 0.943     |      |      |        |            |             |
| W < W(0.5, 43), the distribution is approximately normal |           |      |      |        |            |             |
|                                                          |           |      |      |        |            |             |

Shapiro Wilk for Arsenic

|               | ln of ordered Conc. x(i)                       |             | ln of Reverse Order x(n-i+1) | Difference x(n-i+1)-x(i) | a(n-i+1)   | b(i)       |
|---------------|------------------------------------------------|-------------|------------------------------|--------------------------|------------|------------|
|               | -0.820980552                                   | 0.674009067 | 2.451005098                  | 3.27198565               | 0.3894     | 1.27411121 |
|               | -0.415515444                                   | 0.172653084 | 2.219203484                  | 2.63471893               | 0.2684     | 0.70715856 |
|               | 0                                              | 0           | 2.208274414                  | 2.20827441               | 0.2334     | 0.51541125 |
|               | 0.470003629                                    | 0.220903412 | 2.104134154                  | 1.63413053               | 0.2078     | 0.33957232 |
|               | 0.641853886                                    | 0.411976411 | 2.028148247                  | 1.38629436               | 0.1871     | 0.25937567 |
|               | 0.693147181                                    | 0.480453014 | 1.824549292                  | 1.13140211               | 0.1695     | 0.19177266 |
|               | 0.916290732                                    | 0.839588705 | 1.791759469                  | 0.87546874               | 0.1539     | 0.13473464 |
|               | 0.955511445                                    | 0.913002122 | 1.791759469                  | 0.83624802               | 0.1398     | 0.11690747 |
|               | 0.955511445                                    | 0.913002122 | 1.740466175                  | 0.78495473               | 0.1269     | 0.09961076 |
|               | 0.993251773                                    | 0.986549085 | 1.722766598                  | 0.72951482               | 0.1149     | 0.08382125 |
|               | 1.064710737                                    | 1.133608953 | 1.667706821                  | 0.60299608               | 0.1035     | 0.06241009 |
|               | 1.098612289                                    | 1.206948961 | 1.667706821                  | 0.56909453               | 0.0927     | 0.05275506 |
|               | 1.16315081                                     | 1.352919806 | 1.648658626                  | 0.48550782               | 0.0824     | 0.04000584 |
|               | 1.16315081                                     | 2.781246039 | 1.648658626                  | 0.48550782               | 0.0724     | 0.03515077 |
|               | 1.16315081                                     | 6.007425991 | 1.568615918                  | 0.40546511               | 0.0628     | 0.02546321 |
|               | 1.252762968                                    | 2.195152016 | 1.568615918                  | 0.31585295               | 0.0534     | 0.01686655 |
|               | 1.280933845                                    | 0.913002122 | 1.481604541                  | 0.2006707                | 0.0442     | 0.00886964 |
|               | 1.30833282                                     | 0.172653084 | 1.481604541                  | 0.17327172               | 0.0352     | 0.00609916 |
|               | 1.335001067                                    | 0.674009067 | 1.458615023                  | 0.12361396               | 0.0263     | 0.00325105 |
|               | 1.335001067                                    | 1.99088424  | 1.458615023                  | 0.12361396               | 0.0175     | 0.00216324 |
|               | 1.335001067                                    | 1.352919806 | 1.435084525                  | 0.10008346               | 0.0087     | 0.00087073 |
|               | 1.410986974                                    | 1.782227848 | 1.410986974                  | 0                        | 0          | 0          |
|               | 1.435084525                                    | 3.210401996 | 1.335001067                  | -0.1000835               |            | 0          |
|               | 1.458615023                                    | 1.352919806 | 1.335001067                  | -0.123614                |            | 0          |
|               | 1.458615023                                    | 0.839588705 | 1.335001067                  | -0.123614                |            |            |
|               | 1.481604541                                    | 0.411976411 | 1.30833282                   | -0.1732717               | 3.97638115 |            |
|               | 1.481604541                                    | 1.640791516 | 1.280933845                  | -0.2006707               |            |            |
|               | 1.568615918                                    | 0.913002122 | 1.252762968                  | -0.3158529               | W(0.05,43) | 0.943      |
|               | 1.568615918                                    | 0           | 1.16315081                   | -0.4054651               | W(ln)=     | 0.91061638 |
|               | 1.648658626                                    | 2.781246039 | 1.16315081                   | -0.4855078               |            |            |
|               | 1.648658626                                    | 2.059467595 | 1.16315081                   | -0.4855078               |            |            |
|               | 1.667706821                                    | 1.352919806 | 1.098612289                  | -0.5690945               |            |            |
|               | 1.667706821                                    | 1.133608953 | 1.064710737                  | -0.6029961               |            |            |
|               | 1.722766598                                    | 0.986549085 | 0.993251773                  | -0.7295148               |            |            |
|               | 1.740466175                                    | 2.127557784 | 0.955511445                  | -0.7849547               |            |            |
|               | 1.791759469                                    | 4.427380539 | 0.955511445                  | -0.836248                |            |            |
|               | 1.791759469                                    | 4.924864104 | 0.916290732                  | -0.8754687               |            |            |
|               | 1.824549292                                    | 4.113385313 | 0.693147181                  | -1.1314021               |            |            |
|               | 2.028148247                                    | 2.460555898 | 0.641853886                  | -1.3862944               |            |            |
|               | 2.104134154                                    | 2.96792475  | 0.470003629                  | -1.6341305               |            |            |
|               | 2.208274414                                    | 1.782227848 | 0                            | -2.2082744               |            |            |
|               | 2.219203484                                    | 1.782227848 | -0.415515444                 | -2.6347189               |            |            |
|               | 2.451005098                                    | 1.711734767 | -0.820980552                 | -3.2719857               |            |            |
|               |                                                |             |                              |                          |            |            |
|               | Sum of xi                                      | 56.26742214 | 56.26742214                  |                          |            |            |
|               |                                                |             |                              |                          |            |            |
| Mean          | 1.308544701                                    |             |                              |                          |            |            |
| n=            | 43                                             |             |                              |                          |            |            |
| sum of xi^2   | 90.99206827                                    |             |                              |                          |            |            |
| 1/n=          | 0.023255814                                    |             |                              |                          |            |            |
| xi=(sum xi)^2 | 3166.022794                                    |             |                              |                          |            |            |
| d=            | 17.3636312                                     |             |                              |                          |            |            |
| W=            | 0.910616383                                    |             |                              |                          |            |            |
| W(0.05,43)=   | 0.943                                          |             |                              |                          |            |            |
|               | W<W(0.5,43), the distribution is not lognormal |             |                              |                          |            |            |

## **APPENDIX F**

### **FH-021 Screening Results**

**Summary of Detected Analytical Results, Detection Limits and Screening Criteria for FH-021 Samples**

| Location | Sample ID | Depth   | Parameter       | Result   | PQL    | Units | Screening Criteria             | Screening Value | Units |
|----------|-----------|---------|-----------------|----------|--------|-------|--------------------------------|-----------------|-------|
| TR101E   | 21TR101   | 0.0-8.0 | Arsenic         | 3.2      | 0.4    | mg/kg | Soil Background                | 9.2             | mg/kg |
|          |           |         | Barium          | 81.5     | 0.08   | mg/kg | Soil Background                | 157.3           | mg/kg |
|          |           |         | Cadmium         | 0.62     | 0.06   | mg/kg | Soil Background                | 0.67            | mg/kg |
|          |           |         | Chromium        | 12.3     | 0.09   | mg/kg | Soil Background                | 24.9            | mg/kg |
|          |           |         | Lead            | 23       | 0.23   | mg/kg | Soil Background                | 19              | mg/kg |
| FHGW164  |           | --      | Arsenic         | 0.0048   | 0.0021 | mg/l  | 30 TAC 335 Groundwater         | 0.05            | mg/l  |
|          |           |         | Barium          | 0.314    | 0.0003 | mg/l  | 30 TAC 335 Groundwater         | 2.0             | mg/l  |
|          |           |         | Selenium        | 0.0082 J | 0.0022 | mg/l  | 30 TAC 335 Groundwater         | 0.05            | mg/l  |
| TR101W   | 21TR104   | 0.0-8.0 | Arsenic         | 3.3      | 0.36   | mg/kg | Soil Background                | 9.2             | mg/kg |
|          |           |         | Barium          | 58.9     | 0.07   | mg/kg | Soil Background                | 157.3           | mg/kg |
|          |           |         | Cadmium         | 0.21     | 0.06   | mg/kg | Soil Background                | 0.67            | mg/kg |
|          |           |         | Chromium        | 8.9      | 0.08   | mg/kg | Soil Background                | 24.9            | mg/kg |
|          |           |         | Lead            | 7.2      | 0.21   | mg/kg | Soil Background                | 19              | mg/kg |
|          |           |         | Acetone         | 0.008    | 0.006  | mg/kg | 30 TAC 335 Industrial Soil GWP | 1020            | mg/kg |
|          |           |         | Trichloroethene | 0.016    | 0.006  | mg/kg | 30 TAC 335 Industrial Soil GWP | 0.5             | mg/kg |
| TR102E   | 21TR103   | 0.0-8.0 | Arsenic         | 5.5      | 0.39   | mg/kg | Soil Background                | 9.2             | mg/kg |
|          |           |         | Barium          | 58.3     | 0.08   | mg/kg | Soil Background                | 157.3           | mg/kg |
|          |           |         | Cadmium         | 0.29     | 0.06   | mg/kg | Soil Background                | 0.67            | mg/kg |
|          |           |         | Chromium        | 10.5     | 0.09   | mg/kg | Soil Background                | 24.9            | mg/kg |

**Summary of Detected Analytical Results, Detection Limits and Screening Criteria for FH-021 Samples**

| <b>Location</b> | <b>Sample ID</b> | <b>Depth</b> | <b>Parameter</b> | <b>Result</b> | <b>PQL</b> | <b>Units</b> | <b>Screening Criteria</b>      | <b>Screening Value</b> | <b>Units</b> |
|-----------------|------------------|--------------|------------------|---------------|------------|--------------|--------------------------------|------------------------|--------------|
| TR102E          | 21TR103          | 0.0-8.0      | Lead             | 11.9          | 0.23       | mg/kg        | Soil Background                | 19                     | mg/kg        |
|                 |                  |              | Acetone          | 0.007         | 0.006      | mg/kg        | 30 TAC 335 Industrial Soil GWP | 1020                   | mg/kg        |
|                 |                  |              | Trichloroethene  | 0.008         | 0.006      | mg/kg        | 30 TAC 335 Industrial Soil GWP | 0.5                    | mg/kg        |
| TR102W          | 21TR102          | 0.0-8.0      | Arsenic          | 2.9           | 0.39       | mg/kg        | Soil Background                | 9.2                    | mg/kg        |
|                 |                  |              | Barium           | 64.2          | 0.08       | mg/kg        | Soil Background                | 157.3                  | mg/kg        |
|                 |                  |              | Cadmium          | 0.11          | 0.06       | mg/kg        | Soil Background                | 0.67                   | mg/kg        |
|                 |                  |              | Chromium         | 12.3          | 0.09       | mg/kg        | Soil Background                | 24.9                   | mg/kg        |
|                 |                  |              | Lead             | 10.6          | 0.23       | mg/kg        | Soil Background                | 19                     | mg/kg        |
|                 |                  |              | Naphthalene      | 0.01          | 0.006      | mg/kg        | 30 TAC 335 Industrial Soil GWP | 409                    | mg/kg        |
|                 |                  |              | Arsenic          | 0.0038        | 0.0021     | mg/l         | 30 TAC 335 Groundwater         | 0.05                   | mg/l         |
| FHGW165         | --               |              | Barium           | 0.232         | 0.0003     | mg/l         | 30 TAC 335 Groundwater         | 2.0                    | mg/l         |
|                 |                  |              | Lead             | 0.0035        | 0.0009     | mg/l         | 30 TAC 335 Groundwater         | 0.015                  | mg/l         |
|                 |                  |              | Naphthalene      | 0.019         | 0.005      | mg/l         | 30 TAC 335 Groundwater         | 1.46                   | mg/l         |